INFORMATION MANAGEMENT BY FEDERAL REGULATORY AGENCIES

HEARINGS

BEFORE THE

SUBCOMMITTEE ON REPORTS, ACCOUNTING, AND MANAGEMENT

OF THE

COMMITTEE ON GOVERNMENT OPERATIONS UNITED STATES SENATE

NINETY-FOURTH CONGRESS

FIRST SESSION

JULY 22 AND 24, 1975

PART 1

Printed for the use of the Committee on Government Operations

U.S. GOVERNMENT PRINTING OFFICE

56-957 O WASHINGTON : 1975

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price $2.15

COMMITTEE ON GOVERNMENT OPERATIONS

ABRAHAM RIBICOFF, Connecticut, *Chairman*

JOHN L. McCLELLAN, Arkansas
HENRY M. JACKSON, Washington
EDMUND S. MUSKIE, Maine
LEE METCALF, Montana
JAMES B. ALLEN, Alabama
LAWTON CHILES, Florida
SAM NUNN, Georgia
JOHN GLENN, Ohio

CHARLES H. PERCY, Illinois
JACOB K. JAVITS, New York
WILLIAM V. ROTH, Jr., Delaware
BILL BROCK, Tennessee
LOWELL P. WEICKER, Jr., Connecticut

Richard A. Wegman, *Chief Counsel and Staff Director*
Paul Hoff, *Counsel*
Paul L. Leventhal, *Counsel*
Eli E. Nobleman, *Counsel*
Matthew Schneider, *Counsel*
John B. Childers, *Chief Counsel to the Minority*
Brian Conboy, *Special Counsel to the Minority*
Marilyn A. Harris, *Chief Clerk*
Elizabeth A. Preast, *Assistant Chief Clerk*
Harold C. Anderson, *Staff Editor*

Subcommittee on Reports, Accounting and Management

LEE METCALF, Montana, *Chairman*

JOHN L. McCLELLAN, Arkansas
EDMUND S. MUSKIE, Maine
SAM NUNN, Georgia
JOHN GLENN, Ohio

BILL BROCK, Tennessee
CHARLES H. PERCY, Illinois
LOWELL P. WEICKER, Jr., Connecticut

Vic Reinemer, *Staff Director*
E. Winslow Turner, *Chief Counsel*
Lyle Ryter, *Minority Counsel*
Jack Chesson, *Counsel*
Gerald Sturges, *Professional Staff Member*
Jeanne A. McNaughton, *Chief Clerk*

CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

Tuesday, July 22, 1974

	Page
Clayman, Jacob, secretary-treasurer, Industrial Union Department, AFL–CIO, Washington, D.C., accompanied by Richard Prosten, director, Research Department, and Brian Turner, staff member	7
Allen, June, North Anna Environmental Coalition, Charlottesville, Va	78
Silbergeld, Mark, attorney, Consumers Union, Washington office	141

Thursday, July 24, 1975

Nadel, Mark V., assistant professor of government, Cornell University	163
Green, Mark, director, Corporate Accountability Research Group, Washington, D.C., and accompanied by Irene Till, economist	180

ADDITIONAL INFORMATION

Senator Metcalf:	
Opening statement	1
Excerpt from the Congressional Record, June 10, 1975	2
Letter from John A. Grady, Chairman of the Interagency Regulatory Accountants Committee, re expressing thoughts on Information Management, June 23, 1975	3
Letter from James L. Pate, Assistant Secretary for Economic Affairs, U.S. Department of Commerce, re requesting information relating to the clearance of BEA's report forms on U.S. direct investment abroad by the National Advisory Council on International Monetary and Financial Policies, July 30, 1975 (with enclosures)	44
Memorandum to James A. Griffin, Chairman, NAC Working Group on Foreign Investment Surveys, from George R. Kruer, Chief, International Investment Division, U.S. Department of Commerce, July 30, 1974	46
Memorandum to NAC Working Group, from James A. Griffin, Chairman, NAC Working Group on Foreign Investment Surveys, August 13, 1974 (with attachment)	51
Memorandum to Fred Springborn, executive secretary, National Advisory Council on International Monetary and Financial Policies, from George R. Kruer, Chief, International Investment Division, U.S. Department of Commerce, June 24, 1974	54
Letter from James L. Pate, Assistant Secretary for Economic Affairs, U.S. Department of Commerce, re list of NAC members and list of members of the "working group", August 12, 1975	67
Letter from Mark Silbergeld, attorney, Washington office, Consumers Union, re update of portion of testimony of July 22, 1975, dated July 23, 1975	142

Alphabetical List of Witnesses

Allen, June:	
Map indicating location of North Anna Reactor	80
Photo showing North Anna Reactor under construction above fault visible in excavation for reactor No. 3	81
Excerpts from papers by Dr. Ralph E. Lapp, atomic scientist who supports the use of nuclear energy	91

ALPHABETIAAL LIST OF WITNESSES—Continued

	Page
Allen, June—Continued	
Some biological hazards of the Point Beach Nuclear Power Plant in Wisconsin, by Irving Lyon, Fellow of the American Association for the Advancement of Science and Consultant for the Dairy Industry	94
Chronology of geological concern at the North Anna Nuclear Station	110
Progress report of the North Anna Environmental Coalition of November 1973, prepared at the request of Congress Watch, a Nader organization in Washington, D.C	115
Chronology of events of 1970 at nuclear excavation raises serious questions and doubts in public mind	119
NAEC calls AEC investigation report "Fraudulent", release of April 11, 1974	123
Geological report of the North Anna Nuclear Power Station, Virginia	126
Letter to Prof. William Rodgers, Georgetown University Law Center, Washington, D.C., from Paul J. Roper, assistant professor, June 3, 1975	133
Clayman, Jacob:	
Questionnaires:	
Parent firm form (with deletions recommended by National Advisory Committee)	18
Parent firm form (with deletions recommended by Bureau of Economic Analysis)	23
Affiliate firm form (with deletions recommended by National Advisory Committee)	28
Affiliate firm form (with deletions recommended by the Bureau of Economic Analysis)	36
Functions of the Industrial Union Department, AFL–CIO	69
Biographical sketch	69
Prepared statement	70
Green, Mark:	
Testimony	180
Prepared statement	187
Nadel, Mark V.:	
Testimony	163
Prepared statement	168
Silbergeld, Mark:	
Testimony	141
Prepared statement	144
Letter to Senator Metcalf of July 23, 1975, re updating portion of testimony of July 22 on information management by regulatory agencies	142
Till, Irene:	
Prepared statement	180

APPENDIX

Lawing, Jim, a Representative in Congress from the State of Kansas:	
Letter to the Committee on Government Operations answering three specific questions of special concern as a lawyer representing the Kansas Civil Liberties Union's efforts	199
"The Concentration of Economic Power," by Markley Roberts, economist in the AFL–CIO Department of Research	203
Letter to Vic Reinemer, staff director, Subcommittee on Reports, Accounting and Management, from Kenneth A. Guenther, Assistant to the Board of Governors, Federal Reserve System, dated September 16, 1975, re: commercial banks that participated in the Board of Governors' Monthly Interest Rate Survey for the month of November 1974, and that failed to so participate for the month of July 1975	209
Article: Vepco Fined $60,000 for A-Plant Fault, from the Washington Post, September 12, 1975, by Hal Willard	210

INFORMATION MANAGEMENT BY FEDERAL REGULATORY AGENCIES

TUESDAY, JULY 22, 1975

U.S. SENATE,
SUBCOMMITTEE ON REPORTS, ACCOUNTING, AND MANAGEMENT OF THE COMMITTEE ON GOVERNMENT OPERATIONS,
Washington, D.C.

The subcommittee met at 10:20 a.m., pursuant to call, in room 1318, Dirksen Senate Office Building, Senator Lee Metcalf (chairman of the subcommittee) presiding.

Present: Senator Metcalf.

Also present: Vic Reinemer, staff director; E. Winslow Turner, chief counsel; Jeanne A. McNaughton, chief clerk; Lyle Ryter, minority counsel; John B. Chesson III, counsel; and Gerald Sturges, professional staff member.

OPENING STATEMENT OF SENATOR METCALF

Senator METCALF. The subcommittee will be in order.

The Subcommittee on Reports, Accounting, and Management today begins hearings on Information Management by Federal Regulatory Agencies.

We are seeking answers to two large questions:

One: How good is the data upon which Government regulatory decisions are based?

Two: How can its accuracy, adequacy, timeliness, and availability be improved?

To put it another way, I will cite what Pearson Hunt termed in the May–June issue of the Harvard Business Review as the "Law of Information."

Mr. Hunt said that when in Ireland recently he came upon this law developed by one Professor Finagle. This law has three provisions:

One: The information we have is not what we want;

Two: The information we want is not what we need; and

Three: The information we need is not available.

When these hearings were initially announced, in the June 10 Congressional Record, I listed 12 specific questions on which testimony is invited. I am asking the staff to insert them at this point in the record.

[The Congressional Record excerpt referred to follows:]

[From the Congressional Record, Senate—June 10, 1975]

Here are some of the questions to which we seek answers:

First. What are the "information gaps" which hamper regulatory agencies and users of the information they collect?

Second. Is information that is publicly available—although perhaps obtainable only by going to many sources at considerable expense—not conveniently available to State regulatory agencies and to the public from the Federal agency which collects it?

Third. Is the information available only on an aggregated industry basis? If so, how can an agency and the users ascertain that aggregates and averages are correct if they do not see individual company data on which the aggregate information is based?

Fourth. To what extent is reported data verified by the agency which collects it?

Fifth. How often is basic data regarding company operations, management, assets, liabilities, capitalization, and control collected? Should information now collected only as part of occasional "benchmark surveys" be available on a more regular basis?

Sixth. What is the regulatory lag between the time information is attainable within the firm making the report and the time it is available to the agency and those parties to whom the agency makes it accessible?

Seventh. What is the regulatory lag between the time that agencies receive reports and the time that statistical compilations are published? What are the reasons for delay?

Eighth. Should agencies provide more analysis and evaluation of statistical data than are now available?

Ninth. What do the agencies do to help guide the public to information in their files? How can those procedures—or publications—be improved? Is inaccurate or outdated data flagged?

Tenth. What charges are levied by the agencies for reproduction of reports? What are the reasons for the disparity of these charges?

Eleventh. Prior to enactment of the Hart amendment to the Alaska Pipeline Act, regulatory agency questionnaires to 10 or more firms were subject to veto by the Office of Management and Budget. Now they are subject to review by the General Accounting Office. Is the revised procedure working out satisfactorily from the viewpoint of reporting companies, the agencies, and the using public? Should data sought by Congress from executive departments whose questionnaires are not approved by the executive branch be collected by independent regulatory agencies?

Twelfth. What progress is being made to reduce business burden—while maintaining or improving the accuracy, adequacy, timeliness, and availability of reports—by interagency development of uniform reporting requirements regarding company operations, management, assets, liabilities, capitalization, and control?

Senator METCALF. These questions have been provided to witnesses and are also available at the press table.

I am also submitting for the hearing record a letter from John Grady, chairman of the Interagency Regulatory Accountants Committee—IRAC.

This group consists of the chief accounting and financial officers of 19 Federal agencies which prescribe regulations on accounting and reporting of financial data.

This letter provides initial comments of the IRAC working group on the 12 questions posed by the subcommittee. Later on in these hearings we will invite testimony from officials of some of the agencies represented in the IRAC group.

[The letter referred to follows:]

Interstate Commerce Commission
Washington, D.C. 20423

BUREAU OF ACCOUNTS

June 23, 1975

Honorable Lee Metcalf
United States Senate
Washington, D. C. 20510

Dear Senator Metcalf:

As Chairman of the Interagency Regulatory Accountants Committee (IRAC), I want to thank you for this opportunity to express the Committee's thoughts on information management.

IRAC is made up of the chief accounting and financial officers of 19 Federal government agencies which prescribe regulations on accounting and reporting of financial data. Included in the membership are representatives of eight independent regulatory commissions; the Civil Aeronautics Board, the Federal Communications Commission, the Federal Maritime Commission, the Federal Power Commission, the Federal Trade Commission, the Interstate Commerce Commission, the Nuclear Regulatory Commission, and the Securities and Exchange Commission.

The purpose of the Committee is to present a forum for the interchange of ideas and discussion of common problems within the regulatory area.

The following responses to your questions on information management represent the consensus of the members of the IRAC committee and should not be interpreted to represent the official position of any independent regulatory agency or group of agencies.

1. Many of the items which we would classify as "information gaps" relate to our current inability to obtain, analyze and make available meaningful data on a timely basis.

Currently, one agency may collect and process data that is used by other agencies. While the information is eventually available, the current collection and processing methods do not insure that the final information product is timely.

Other "gaps" are incomplete identification and indexing of available information and the limited accessibility of available information outside the agencies headquarters area.

These problems can be corrected somewhat through the development and implementation of electronic data processing information systems. The individual agencies are attempting to cope with this problem. A major effort to close the "information gaps," whether on an individual agency basis or on an interagency basis, would initially require some additional resources.

2. In general, information collected by the independent regulatory agencies is readily available to state regulatory agencies and the public. Most data is readily accessible via publications, public reference rooms, and data tapes at little or no cost.

A state agency with responsibilities in the areas of transportation, power, and communications would have to obtain data from three individual Federal agencies. While some information is coordinated through the National Association of Regulatory Utility Commissioners (NARUC), a vast majority of the data is available only from the individual agency.

3. Most information is available both on an individual and aggregated industry basis. Aggregated data can be readily verified from individual reports, the supporting data base available on magnetic tape, and comparison with industry sources.

4. The statistical information is subject to computer verification through selected tolerance and consistency tests, balancing and cross checking routines. Significant errors are corrected. Records of reporting business enterprises are audited by agency auditors.

In most agencies the frequency of audits is determined by the type and size of the reporting company.

5. Most of the basic data is collected on an annual basis. Certain segments, primarily financial and operational data, are collected on a quarterly basis. "Benchmark surveys" usually extend into the data base where the data is pertinent to continuing regulatory responsibilities.

6. There is usually a regulatory lag of one month on the filing of quarterly reports and three months on annual reports. Upon filing with the agency the data generally becomes immediately accessible to the public on an individual company basis.

7. As noted in item 1, there is a regulatory lag in making aggregated data available. The lag varies from 15-20 days for monthly and quarterly reports to one year for major annual publications. The reasons for the delay are many.

Honorable Lee Metcalf

Primary reasons include substantial purification procedures, lack of adequate computer facilities and substantial printing time required by the Government Printing Office. Other problems are delinquent filings of data, volume of data processed at one time and continually changing data base.

8. Ideally, agencies should do more analysis and evaluation of statistical data. This deficiency is being addressed. However, any substantial increase in analytical work would again require resources that are not presently available.

9. Most agencies issue press releases regarding special publications, provide a reference room for public use and prepare replies to individual inquiries regarding availability of information. As noted in item 1, more effort must be made in identifying, indexing and cataloging available information, and to permit the user to know what is available and in what type of format.

Reports and related publications are usually reviewed and updated on an annual basis. One agency is currently planning a "user" survey to determine if its publications meets the needs of users. This should be an ongoing project for all "collectors of data" in assuring that the information requested in the past is meaningful.

10. For the most part, publications are offered to the public through the Government Printing Office at published rates. The public may avail itself of information in the public reference rooms and produce copies on a commercial copier for 25¢ per page.

Requests which involve computer processing are billed at nominal operating costs. The major reason for any disparity of charges is the size or volume of the report or publication. A 100-page report will cost more than a 20-page report and three hours of computer time will cost more than one hour.

11. Generally, the answer is NO. The agencies had a better working relationship with the Office of Management and Budget and were able to obtain a preliminary review subject to final approval by the agency. The General Accounting Office refuses to review any proposed form or revision until approved by order of the agency.

This policy builds in an automatic 45-day time lag before any questionnaire or form can be used by the issuing agency. In our judgment, the independent regulatory agencies established as an arm of Congress should collect any information sought by Congress which falls within the scope of the agencies authorized responsibilities.

Honorable Lee Metcalf

Further, the agencies should have the ability to respond quickly in collecting information on problem areas that arise so that action can be taken if needed.

12. Because of the independent nature of the regulatory agencies, little has been done in a joint effort. IRAC is in the process of developing standard balance sheets and income statements which will provide information leading to uniformity of data collection in those areas.

The independent agencies have worked together when they have joint jurisdiction. The Interstate Commerce Commission and the Federal Maritime Commission use the same accounting system and reports for maritime carriers. The Civil Aeronautics Board and the Interstate Commerce Commission use the same accounting system and reports for freight forwarders using both ground and air transportation.

Other areas which you may wish to consider in your review are:

-- What is the impact of the 1974 Privacy Act? Some guidelines must be established that will permit the agencies to obtain and disseminate the most useful information without harm to the individual. Also, will the restrictions in this Act limit the agencies' ability to deal with problems?

-- What are the agencies' problems that preclude them from obtaining and disseminating certain data? Burden on reporting companies. Cost of obtaining data and cost of publishing data for a small number of users.

We hope our comments will be helpful in your investigation. Please feel free to call upon us if the Committee can be of further service.

Sincerely yours,

John A. Grady

John A. Grady
Chairman, IRAC

Senator METCALF. Our first witness this morning is an old and valued friend who has previously provided valuable counsel to this and other congressional committees—Jake Clayman, secretary-treasurer of the Industrial Union Department, AFL–CIO.

The last time you and I were together, Mr. Clayman, we were receiving an award from the Consumers Federation of America downtown. So I am delighted to have you here again to testify as you have before with your usual wisdom and we will try to follow your guidance.

TESTIMONY OF JACOB CLAYMAN, SECRETARY-TREASURER, INDUSTRIAL UNION DEPARTMENT, AFL–CIO, WASHINGTON, D.C., ACCOMPANIED BY RICHARD PROSTEN, DIRECTOR, RESEARCH DEPARTMENT, AND BRIAN TURNER, STAFF MEMBER

Mr. CLAYMAN. Thank you, Mr. Chairman.

I have with me Richard Prosten, to my left, director of our research department; Brian Turner, on my right, who is a member of that staff.

Mr. Chairman, I am going to start out by reading the testimony I have here, because if I don't, my associates are going to be very greatly disturbed and I don't want to disturb them. However, I am aware of the time limitations and I may perhaps not read it all. If so, I trust that the entire statement will be placed in the record.

Essentially we have a most interesting problem here, with our great Government and its inventive people. We have been the provider of the recording technology, information storing, data processing for the whole world. Yet, with all this enormous capacity for collecting, for receiving, for cataloging, for storing information, quite obviously we do a relatively poor job in areas that have enormous import for the people of the country and in our particular case we speak for the workers of the country.

While this seems to be an academic issue to many people, unfortunately, as the chairman knows, this is far beyond academia. And this has vital bearing; the information that your committee and that you have been seeking over the years has vital bearing on the health of our society.

As we understand it, the current hearings are to assess the sufficiency of data on which government regulatory decisions are based, and how the accuracy, adequacy, and availability of this data might be improved. We appreciate this chance to appear before your subcommittee and share with you our feelings on the inadequacies of information flowing from governmental agencies.

We realize that the Federal regulatory system is currently under great attack. It would appear that the President of the United States is fashioning a campaign to emasculate much of the good that these agencies do accomplish. Clearly, there are some instances of overregulation. But all too frequently, there is too little regulation.

This situation flows from the fact that the administration has stacked these agencies with people whose interests seem to lie more with the entities they are supposed to regulate than with the public they are supposed to protect.

We wish to call to your attention a variety of situations in which we feel the government's performance in the field of data gathering is totally inadequate. Since the executive departments have not seen fit to compile the sorts of data that we feel are needed, it seems appropriate to ask that the regulatory agencies try their hand at it.

Primarily we are concerned with the lack of hard data in regard to employment. We do not mean the sorts of aggregate data about how many people are working and how many people are collecting unemployment checks which the Department of Labor issues. Rather we need figures indicating how and why people have become unemployed; where work opportunities are diminishing or vanishing; what industries are suffering or are likely to suffer substantial noncyclical unemployment; and various offshoots of such approaches to recordkeeping.

It seems to us that economic data collection in this country is quite unresponsive to some of the very obvious and most pressing needs of our citizens. In many cases where important data is collected, it is terribly out of date by the time it is put into the hands of those who need it to shape national policies.

If we review the economic issues that have achieved crisis status in this country over the last decade or so, we find that in an amazing number of cases, we were told that nobody knows the true seriousness of the problem or how to fashion solutions because there was not sufficient information.

Unless this be interpreted as an overstatement, all of us, at least this side of the table, I am sure on your side of the table, can testify to any number of situations where the people who should know are forced to the corner and admit they simply don't know because they haven't been directed or authorized or allowed to gain the necessary information.

Clearly, it would be unreasonable for us to expect the immediate availability of data concerning every aspect of every contingency that may occur in or to a country as vast and economically complex as ours. But we feel there are certain areas which cry out for attention. We don't really care which agency or department does the data collection, but we do care that it be collected, analyzed and quickly made available to Congress and the public.

The sorts of data with which we are most concerned—because they are so totally unavailable—are those that would give us a handle on problems—current and potential—that affect jobs and employment.

One example of what we're talking about, and which the chairman of the committee obviously is familiar with, was quite noticeable during the fuel crisis. Despite the elaborate budgets of a host of agencies and departments that collect data, nobody could find out how many people were put out of work, or forced onto reduced workweeks, as a result of this situation. The closest that we had to an answer was based on what new applicants for unemployment insurance indicated on their application as the reason they thought they were now unemployed. This approach was not only unscientific but unacceptable as a method of understanding the effects of then current economic developments. It was based on the poten-

tially subject perceptions of insurance applicants. Of course, the perceptions of those who were ineligible for unemployment insurance were not counted at all. There was a vast group of people ineligible to collect unemployment insurance, and their attitudes, their perceptions, for what they were worth, were not tapped.

Parenthetically, it was equally disturbing that seemingly nobody, in or out of government, could tell us how much petroleum was available—either on top of or beneath the ground.

Senator METCALF. That goes for natural gas, or coal, or any other natural resources.

Mr. CLAYMAN. Exactly, Mr. Chairman. I recall and you recall, we still have it. We have all kinds of charges about undersupplies, oversupplies, conspiracies, price-fixing. All of these arise out of the obvious fact that our government just doesn't know what kind of oil reserves we have, indeed, what kind of current inventory that could be available quickly. And for a country as complex as ours and so reliant upon energy, to my simple reasoning, this becomes almost sheer tragedy. And the pity is that this so far has not been perceived, as I see it, in our current administration.

But the jobs question bothered us the most, for it reminds us of just how inadequate and anemic our society's base of knowledge in this area really is. It reminded us that for many years the labor movement has been pleading for that kind of data—data that would enable planners and policymakers to more successfully factor the jobs and thus the welfare of working people into their actions and proposals.

The issue of jobs—and job loss, job creation and the like—comes up again and again as this country becomes aware of the growing impact of multinational firms on our economy. For a number of years now we have felt that American jobs were being shipped abroad at an alarming rate.

The multinational enterprises and their friends insist that we are wrong—on the assumption that we don't have the sufficient data in regard to their operations; they claim that, in fact, this process has created jobs in our economy.

If I may digress, and yet it is very significant, we have been saying, our economists have been saying, that from the period of 1966 to 1972, there has been a loss of 1 million American jobs because of increasing imports, and a substantial amount of these imports coming from American multinationals producing abroad. If this is so, then this is a very serious allegation that goes to the core of the stability and the future of our economy, because, without jobs, America is nothing.

The multinationals have been saying most vehemently that this is a canard, and the fact it, and I say this earnestly, that we cannot say with exactness, scientific exactness, that there are a million jobs that were lost. The employers obviously won't say this, and the Government can't say this because it doesn't know. Let's look at this issue, if I may suggest, for a minute. If it is true that the picture we have presented is sound, then we have got a very basic, fundamental problem that needs the attention of Congress and the administration quickly. Yet, there we are in a debater's stance, employers

obviously saying the usual, and we are saying those things that are closest to our hearts and our mind; and our economists tell us of the facts, with neither one of us truly prepared to, with exactness, urge that our factual base is the actual base.

And the one party in our society that essentially has that kind of responsibility to protect the public interests is unable to answer the debaters' charges because it does not—indeed, as you will see very quickly from what I am about to say—it does not want to be privy to these facts, I assume, conceivably, because it may be politically embarrassing. This is a horrendous thought.

We still think we're right, but despite intense interest in the subject on the part of many sectors, there is no body of date that can be used to prove or disprove our allegations.

Collecting reliable information and subsequently pursuing meaningful economic analysis on foreign direct investment—both inward and outward—is essential to the economic well-being of this country. The American people and the American Congress have a right to this information.

Overseas production by the controlled foreign affiliates of U.S. multinational firms is now 3½ times larger than either U.S. imports or exports; it now totals roughly $350 billion per year. Projecting from the most recent Commerce Department estimates—made for 1970—U.S. multinationals' overseas employment should now be over 5½ million—just over the average unemployment in the United States during calendar year 1974. Is it 5½ million? Is it 500,000? Is it 1½ million. Is it 2 million? Is it important for our national security and our understanding to know what that figure is? Is it a meaningful figure? We think it is desperately meaningful. Yet, I gather that our Government can't tell us that with exactness. And that runs throughout the economy, particularly as it applies to multinational corporations.

So, obviously, Mr. Chairman, both of us, you on your side and we on this side, are not talking about a triviality. We are not talking about a theory. We are not talking about an academic issue. We are talking about the life of our economy and its continued upbeat.

Let me return to my prepared testimony now, where there is a bit of a horror story that has unfolded. I don't want to be in the position of charging bad faith, desperate motivations, but let this recounting speak for itself.

In this rapidly changing situation, where multinationals expand abroad as the domestic economy languishes, Congress has a duty to see that all necessary information is collected and that the economic analyses that depend on these statistics are responsibly carried out. Study after study in this area is forced to conclude with an apology for the tentativeness of its results, because the underlying economic statistics are too weak to provide solid analytical conclusions. We won't take up your time listing the various individuals and organizations who have lamented our Government's irresponsibility in this area, but there are many respected experts who would certainly welcome more responsible data gathering and analysis.

On outward direct investment by U.S. multinationals—an issue of great concern to us and, we believe, to the Nation—the admin-

istration's recent record on data gathering has been less than laudable. In this regard, we would like to bring to the attention of this subcommittee the dismal history of what happened when a responsible agency of the Department of Commerce attempted to improve its data collection on U.S.-based multinational firms.

The Bureau of Economic Analysis, Department of Commerce, has responsibility for gathering and assembling primary economic data on the foreign operations of U.S. multinational firms. Their last benchmark survey was conducted in 1966, and they publish annual updated estimates on the basis of voluntary survey forms sent out to a small sample of the known universe of American multinational corporations.

As the multinationals' overseas activities increased, the Bureau of Economic Analysis recognized that their previous bench mark census had become hopelessly outdated, as of course it was only 9 years ago, and that the range of information covered in the last bench mark was seriously inadequate to deal with urgent analytic and policy needs.

In late 1972, the specialists at BEA began their own preliminary analysis of topics that should be covered in such a study, and they devised draft survey forms to be sent out to U.S. multinational parent corporations and their foreign affiliates.

When this process was completed, the proposed forms were submitted for approval to a Cabinet-level interagency clearing committee, the National Advisory Committee on International Monetary and Financial Policy—NAC—composed of representatives from Treasury, Commerce, the Federal Reserve Board, the Export-Import Bank, and the Department of State. The proposed bench mark survey was handled at the National Advisory Committee by a working committee chaired by James Griffin of Treasury.

The proposed BEA survey would have expanded the scope of the data collected in 1966 and in subsequent sample surveys. For the first time they would have asked for detailed information on employment, skill levels, and employee compensation at home and abroad; on the cost and location of research and development activities; on production by product line; on taxes paid into different jurisdictions at home and abroad; on transactions between parent and affiliate; and on the treatment of domestic and foreign operations in the income statement of the parent firm.

This was not, in our view, an exhaustive list of what we needed to know about U.S. multinationals. It would have been far inferior to data presently collected on comparable domestic activities. It would, however, have represented a significant improvement over the data on multinationals presently gathered by the Federal Government. It would have fulfilled needs recognized by all users of data on multinational corporations, and the BEA understood it as necessary for responsible analysis and rational policy evaluation.

If I may, for just a moment, I would like to enter a word of hurrah and congratulations for the so-called bureaucrats, people who do this kind of work from day to day, not limited in their original conceptions and perceptions by political considerations; they came up with what seemed to be a wholesome beginning in a relatively unplowed field.

Senator METCALF. Mr. Clayman, once upon a time I served on an appellate court. When somebody wrote an opinion, I said I concur, and may I concur in the hurrah that you have expressed?

Mr. CLAYMAN. These are the fellows that work down in the ditches and normally don't get the public visibility, and, more often than not, at least in my judgment, they are far in advance of those who are more visible and more obvious to the public. It is a pity that it is that way, but I think it is one of the facts of political life. Certainly, it is in the United States. Conceivably, it may be worldwide.

The reception given to this vitally needed expansion of our fundamental data base on multinational corporations was startlingly negative, although, I must say, predictable. The NAC rejected every item on the survey form that was not strictly related to balance-of-payments accounting—on the interpretation that the Bretton-Woods enabling legislation allows only balance-of-payments reporting. We call this a strange interpretation because even the weak analytic data that had been collected in 1966—without any challenge as to its legality—was now ruled out of order. No one in those days questioned the legality of the questionnaires, the information that was sought and obtained by the Bretton-Woods enabling legislation. That is a modern phenomenon. Everything having to do with research and development, with the breakdown of production figures, with employment, skill levels and compensation, and even with trade between the multinational parent and its foreign affiliates—all that and still more was cut out of the proposed survey by this Cabinet-level interagency committee, which made the questionnaire anemic and almost worthless—not altogether worthless, but almost worthless, to discover the kind of information that a government needs and the public needs and Congress needs to make its interpretations of valid legislation for the future.

We find it hard to believe that such obstructive action, against the sound initiative of a highly professional Federal agency, could represent anything other than high administration policy.

Somebody up there doesn't want to know—or doesn't want the public and the Congress to know—the true facts about the multinational corporations and their effects on the domestic economy.

I wish I could come to a different conclusion because this is a harsh observation that I made. But I don't know, as I search my own mind, I don't know what other interpretation that reasonable people looking at this can place upon that action.

In our judgment, this is a scandalous situation which cannot be allowed to endure.

We think the record of failure to responsibly provide the public and the Congress with accurate, up-to-date information on multinational investment speaks for itself.

At issue here is our ability to analyze the makeup and operation of the huge multinational sector of the U.S. economy which, to date, has been kept hidden from responsible economic and social analysis.

The Nixon-Ford administration has blocked attempts at monitoring the activities of U.S.-based global firms.

The multinational sector is too large and potentially too damag-

ing a part of the American economy to remain behind the veils of corporate confidentiality.

If rational policies that can strengthen the domestic economy are to be implemented, we must have reliable data on the multinational sector and its significance in our economy. We must place particular emphasis on the employment aspects of the question.

But let us return to what is seen as an essentially domestic issue.

In the late 1960's, this Nation belatedly began to look into environmental quality—both on and off the job. From that time until this very day—and, I guess it will be true for years to come—spokesmen for industry have told everybody they could find that even modest environmental standards would mean the closing of many industrial facilities and the loss of untold thousands of jobs.

Despite industry's dire predictions, we have been unable to identify any significant number of plant closings in which safety, health, or environmental requirements were even alleged as reasons for the action. And in those few cases where such causation was cited, we were rarely able to verify the claim.

We believe that safety, health, and environmental questions will be with us for many years to come. We think that it is in the national interest to study, as completely as possible, the impact to date, as well as the potential future implications of such legislation and standard setting on jobs and employment.

Only with solid information in hand will we be able to look at these serious problems without being subjected to unverifiable polemics.

We have given you a few examples of areas where job-related data is needed and where presently available statistics are totally inadequate for national policy planning or response.

Senator Metcalf. Mr. Clayman, I think your statement is so thoughtful and perceptive that I hope you don't leave anything out which you want to talk about.

I think, though, as an old-time friend you will excuse me a minute, if I may step out and meet for the first time Congressman Max Baucus' parents who have just stepped into the room in the back. I will be back again in a couple of minutes.

Mr. Clayman. I think that is very thoughtful and perceptive of you. So I accept your observation, sir. I shall sit here quietly.

Senator Metcalf. Just for a couple of minutes.

Thank you so much. You are always so helpful and so understanding.

[Brief recess.]

Senator Metcalf. Thank you very much.

My apology to you for this interruption. Thank you very much.

Mr. Clayman. This inadequacy is not a recent discovery for us. For many years we have sensed that the absence of data along these lines was painfully apparent. We searched every conceivable agency, bureau, department, and what have you to try and find out what was happening to the jobs of our members and in other sectors of the economy as well. We were unable to locate any source that could tell us such things as:

What sorts of industries are experiencing employment declines and why?

Have there been significant shifts in the traditional geographic patterns of plant installations of given industries or companies—and why?

What identifiable patterns tended to surround the curtailment or closing of facilities?

To be sure, we had some hypotheses about such situations. We assumed that the conglomeration of the U.S. economy during the 1960's was destructive of work opportunities. We assumed that the tax incentives supplied by certain of the States and the antiunion attitudes that frequently characterize these same areas were responsible for the destruction of historical employment opportunities.

We also wondered about the increasing "multinationalization" of the U.S. economy. We wondered how many domestic employment opportunities were being lost to a combination of the tax incentives for job exportation provided by both our Government and host governments and the availability in some countries of heavily controlled labor forces.

At any rate, in our own modest way we undertook to compile a listing of incidents of plant closings and curtailments. We sought reports from unions affiliated with our organization, combined financial journals and other periodicals and cadged information from wherever we could.

Here we are, not being able to find out from our Government these obvious, fundamental, economic facts and starting in our own feeble way with our relatively small resources as compared to government to try to find out for ourselves.

Such an approach as ours, obviously, is not totally scientific and we recognize that it is far from perfect. But as far as we know, it is the only ball game in town.

One hunk of a labor force is taking a look at this enormously fundamental issue because we can't find it anywhere in our Government.

National financial analysts, committees of Congress and various Government agencies frequently come to us because they are interested in exploring one or more of the areas addressed in our survey.

While we are always pleased to share the results of our work with other investigators, we do so with great embarrassment about the inadequacy of our data. Because of the makeshift ways in which we collect it, we cannot be sure of how representative it is of occurrences in the economy at large, nor can we be sure that the sources we have used are correctly reporting the information that we plagiarize from them.

As of the beginning of 1975, our system had been in operation for 4 years, and I confess a feeble system.

In that time span we have noted that 1,701 situations in which jobs were permanently lost. Almost 1,300 of these cases represented permanent plant closings, while another 400 represented permanent curtailments.

None of these instances involved short term layoffs caused by economic fluctuations or other temporary events.

We did not receive complete information on every reported situation but where we did, we discovered the following:

Less than 3 percent of the cases reflected claims that health, safety or environmental controls caused the action.

Approximately 25 percent of the closings and curtailments were related to the impact of foreign competition and they accounted for some 32 percent of all jobs lost.

The average foreign competition related closings involved 379 jobs lost and the average such permanent curtailment involved 559 people. That is each particular shop involved these numbers.

Another major reason for closings involved domestic relocations, most typically to low wages, less urbanized areas. In these cases, an average of 262 jobs were lost in closings and 298 in permanent curtailments.

When we expand the information covering cases where we have complete data to all of the situations of which we are aware, we find that we can account for a loss of almost 500,000 jobs, of which roughly 150,000 can be related to the pressure of foreign competition.

As I said earlier, we are aware of the very great limitation of this data, but at the same time we are frightened by what it seems to suggest.

Is it not the sort of data that this Congress and this Government should cause to be collected with precision so that it might be at hand as the important economic issues of the day are considered?

Perhaps our data is not representative of what is going on in the economy at large, but only a well-funded and skillfully implemented study will be able to resolve that question.

Mr. Chairman, members of the committee, we realize that we may have deviated a bit from the precise topic of these hearings, but feel that it is important to get on the record without concern in these areas.

These items strike us as ones that contain information which investors would need in order to deal in the stock market more effectively. Perhaps it is information which could be most readily collected by an agency such as the SEC.

We are not really too particular about who does the work, although we would want to make sure that it was done competently. As a Nation we must put ourselves in the position to make rational economic policy on the basis of information rather than guesses. We must develop data that will alert us to potential employment problems before they become fatal ailments.

The data collection advances by the independent regulatory agencies—empowered by the Hart amendment to the Alaska Pipeline Act and outlined in the model reporting requirements—are steps toward more comprehensive reform of Federal data collection.

In the not so distant future, piecemeal reforms in Federal data collection will have to give way to a more systematic, coordinated approach.

To date, this lack of coordination in Federal data collection has led to such things as: Incompatible information series; major gaps in the information that is collected; and inefficient and artificial barriers governing exchanges of collected information between agencies.

While information gathering has increased in scope, the different agencies too often gather their data on incompatible definitional bases. This makes it difficult for analysts, both in and out of the Government, to compare related sets of data.

For instance, our information on production, sales, employment, and wages, is collected by industry according to the Standard Industrial Classification (SIC). But our import and export data are gathered according to the substantially different categories of the Tariff Schedule of the United States (TSUS).

As a result, the depth of important penetration or export-related employment are often impossible to calculate.

In addition to these definitional inconsistencies, there are important areas where data are inadequate or not collected at all. We have mentioned a few of these this morning.

Alongside the missing information and the incompatible statistics, we see a third problem area: A lack of imagination in using existing data to derive additional needed data. One area that comes to mind immediately involves the foreign operations of U.S. global corporations and their impact on domestic production and employment.

One branch of the Federal Government, an agency of the Commerce Department, has more or less adequate knowledge of the identity of U.S. multinational corporations; this information is stored on computer tape. But the Commerce Department has no current information on these firms' employment.

The Labor Department, on the other hand, through the Bureau of Labor Statistics, has records of domestic employment patterns for the larger individual firms; and these records, too, are stored on computer tape.

It would be a relatively simple matter to run these two sets of information against each other and thus discover at least the domestic employment performance of U.S.-based multinational corporations. Such a procedure would be inexpensive.

It would require no change in present reporting requirements, nor would it threaten corporate confidentiality in any way. Yet, under present arrangements, these two tapes cannot be brought together, and these important questions remain unanswered.

A few such information gaps can be closed quickly by utilizing currently gathered data. But in the longer run, our whole system of data collection will require streamlining. By eliminating unnecessarily overlapping and duplicative reporting, we could have more and better information, while significantly reducing the costs of data collection and reporting.

Mutually consistent data bases must be established, and existing information gaps must be closed, especially with regard to energy and the overseas operations of U.S. multinational corporations.

We recognize, of course, that such an overhaul of the Federal data gathering system is a longterm project. Yet, the Congress can take some steps toward that future consolidation and streamlining without delay.

A first step would be an assessment of the present diverse programs of Federal data gathering. What questions are being asked, and by which agencies? What are the rules governing interagency exchanges of data?

A comprehensive survey of present data collection will be essential for arriving at a more coherent, less costly system for the future.

Such a necessary preliminary study could well be carried out by the GAO or the Congressional Research Service at the request of this subcommittee.

Parallel to this exhaustive determination of what is now happening in Federal data collection, future reforms will require the careful consideration of alternative approaches to more comprehensive and coordinated data collection. There are many questions to be addressed:

What are the most promising conceptual structures for organizing industry data on a common basis?

What is the range of possibilities for facilitating interagency exchanges of information?

How do we establish standards of confidentiality and protect against their abuse in such a comprehensive data system?

As the Congress implements the many needed reforms of our inefficient data gathering system, these questions should be systematically explored and answered.

In closing, I would like to endorse an idea that appears in the testimony of Dr. Abraham Briloff before the Senate Banking Committee on July 11, 1975.

Dr. Briloff, a certified public accountant and professor of accountancy at the City University of New York's Baruch College, urged the creation of a Corporate Accountability Commission to assume the overarching responsibility of identifying the total informational needs of our society * * * regarding our corporate enterprise and to see how this information can be best accumulated, digested, and disseminated. He stated:

> Failing such a unitary trust I can see the present segmented, limited scope and responsibility as producing intensified conflicts within Government, and an inadequate and inefficient response to the fair informational requirements of our modern democratic society * * * one which requires the delegation of enormous power and responsibility which, in turn, demands a reciprocal measure of accountability to those who have thus delegated the power.

Mr. Chairman, that is our formal statement. Thank you.

Senator METCALF. Thank you very much, Mr. Clayman.

When you sent up the copies of your testimony, Mr. Reinemer and Mr. Turner requested and obtained from the Commerce Department that proposed multinational survey which you mentioned in your testimony, one that was blue penciled and red penciled by the Cabinet-level National Advisory Committee.

I have copies and members of the committee have copies of the questionnaires here, and so do you, as I understand. I think it will help the subcommittee if you would just highlight some of the categories regarding which the Bureau of Economic Analysis sought information which would be needed by the Cabinet-level NAC.

Mr. CLAYMAN. Let me do that quickly.

Senator METCALF. Without objection, this questionnaire will be incorporated at this point in the record.

[Copies of the questionnaires and other pertinent information follow:]

PARENT FIRM FORM

X'd (crossed out) items are those National Advisory Committee deleted

Red X items are those NAC wanted out

FORM BE-10A
(8-13-74) Draft

U.S. DEPARTMENT OF COMMERCE
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION
BUREAU OF ECONOMIC ANALYSIS

CONFIDENTIAL

SURVEY OF U.S. BUSINESS INVESTMENTS ABROAD - 1973

(Report for U.S. Reporter)

RETURN TO:
Bureau of Economic Analysis
ATTN: International Investment
Division - BE-50(SSB)
1401 K Street, NW. (Tower Building)
U.S. Department of Commerce
Washington, D.C. 20230

NOTICE - The information reported on this form will be used exclusively for statistical purposes. It will be held in strictest confidence by this Bureau, and published only in such aggregates which preclude the disclosure of data supplied by individual Reporters.

Control number
A-1

Part I - IDENTIFICATION OF U.S. REPORTER

1. Name of U.S. Reporter

2. Form of organization of U.S. Reporter (Mark one)

- [X] Partnership
- [X] Individual
- [ ] Estate or trust
- [ ] Corporation
- [X] Other - Specify _____

3. Employer Identification Number(s) (used to file data on income and payroll taxes)

4. Identity of top parent (Mark one)

- [ ] U.S. Reporter is not owned or controlled by any other U.S. person to the extent of more than 50 percent
- [X] U.S. Reporter is owned or controlled by another U.S. person to the extent of more than fifty percent →

Name and address of owner

5. State (or U.S. territory or possession) of incorporation or organization of U.S. Reporter (Mark one)

- [ ] Delaware
- [ ] New York
- [ ] California
- [ ] Illinois
- [ ] Other - Specify _____

6. Location of principal administrative office of Reporter (State, U.S. territory or possession)

7. Number of domestic subsidiaries (owned or controlled to the extent of more than fifty percent)

8. Level of consolidation - Report does not consolidate data for the following domestic subsidiaries owned or controlled to the extent of more than fifty percent by U.S. Reporter. (Give name and reason why subsidiary's data are not consolidated.)

	Year (last 2 digits)	Month	Day
9. Reporting period - U.S. Reporter data are for the year ending →			
10. U.S. Reporter terms "Opening balance" or "Beginning of reporting period" always refer to data as of →			
11. U.S. Reporter terms "Closing Balance" or "End of reporting period" always refer to data as of →			

12. Major activity of U.S. Reporter (Mark one)

- [X] Extracting of oil or minerals (including exploration and development)
- [ ] Manufacturing (fabricating, assembling, processing)
- [ ] Selling (or distributing) goods
- [ ] Providing a service
- [ ] Other (Specify _____)

13. What is the major product or service involved in this activity?

IMPORTANT Please read carefully all instructions

1. RULING

A completed Form BE-10A is required from the U.S. Reporter covering the fully consolidated U.S. domestic enterprises. Form BE-10A should be filed by the U.S. person which is not owned, to the extent of more than fifty percent of its voting rights, by any other U.S. person. (Exception: When a U.S. business enterprise is owned more than fifty percent by an individual, the report should be filed by the business enterprise rather than the owning individual.) For corporate reporters, the fully consolidated domestic enterprise is defined to include the domestic operations of every corporation which is resident in the United States and is owned to the extent of more than fifty percent of its voting stock by the reporting U.S. corporation and its majority-owned U.S. corporations. Consolidate every Domestic International Sales Corporation which is owned to the extent of more than fifty percent of its voting stock. Do not consolidate data for foreign affiliates on Form BE-10A.

Reports containing Form BE-10A are due within 60 days after publication of the reporting requirements in the Federal Register. If any inquiries call (202) 523-0632.

2. EXEMPTIONS

Partial exemption, Form BE-10A - U.S. Reporters who are religious, charitable, or other nonprofit organizations or who are individuals, are required to file a BE-10A report, but are exempt from filing the PART III, FINANCIAL SCHEDULES OF Form BE-10A.

3. GENERAL NOTES

a. Currency amounts should be reported in U.S. dollars and rounded to the nearest thousand.

b. If an item is between $ $500.00 enter "0."

c. Use parentheses to indicate negative numbers.

d. Every question on the form should be answered except where reporting is specifically exempt.

e. In PART I, IDENTIFICATION OF U.S. REPORTER, the instruction "Mark one" is often given. When you find it necessary to mark more than one answer, provide an explanation.

f. All questions should be answered in the context of the reporting period for the U.S. Reporter (see items 9, 10, and 11) unless another time period is specified in the instructions.

PERSON TO CONSULT CONCERNING QUESTIONS ABOUT THIS REPORT

Name	Title	Telephone: Area code	Number	Extension

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report (including Forms BE-10A and BE-10B and any statements attached hereto) is correct and complete to the best of their knowledge and belief.

Name of company	Date	Signature of authorized official	Title

The U.S. Code, Title 18 (Crimes and Criminal Procedure), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction. Persons who have access to individual company information are subject to penalties for unauthorized disclosure.

A - 2

Part I - IDENTIFICATION OF U.S. REPORTER - Continued

14. Percent of U.S. Reporter's net sales (as reported in item 59, part III) accounted for by each classification. Account for all classifications which comprise five percent or more of net sales; account for no less than seventy-five percent of net sales. (Holding companies should use total income.) See the "Industry Classifications" in the INDUSTRY CLASSIFICATIONS AND EXPORT AND IMPORT TRADE CLASSIFICATIONS booklet for a full description of each industry.

Code (a)	Percent of sales (b)	Industry (c)
		AGRICULTURE, FORESTRY, AND FISHING
010		Agricultural production - crops
020		Agricultural production - livestock
070		Agricultural services
080		Forestry
090		Fishing, hunting, and trapping
		MINING
101		Iron
102		Copper, lead, zinc, gold and silver
103		Bauxite and other aluminum ores
109		Other metallic ores and metal mining services
120		Coal and other nonmetallic minerals, except oil and gas
131		Crude petroleum extraction (no refining) and natural gas
138		Oil and gas field services
		CONSTRUCTION
150		Construction
		MANUFACTURING
201		Meat products
202		Dairy products
203		Canned and preserved fruits and vegetables
204		Grain mill products
208		Beverages
209		Other food and kindred products
210		Tobacco manufactures
220		Textile mill products
250		Apparel and other finished products made from fabrics and similar materials
240		Lumber and wood products, except furniture
250		Furniture and fixtures
262		Pulp, paper and board mills
264		Miscellaneous converted paper products
265		Paperboard containers and boxes
270		Printing, publishing, and allied industries
281		Industrial chemicals, plastics materials, and synthetics
283		Drugs
284		Soap, cleaners and toilet goods
285		Paints and allied products
287		Agricultural chemicals
289		Chemical products, n.e.c.
291		Integrated petroleum refining and extraction
292		Petroleum refining without extraction
299		Petroleum and coal products, n.e.c.
301		Rubber products
307		Miscellaneous plastics products
310		Leather and leather products
321		Glass products
329		Stone, clay, cement, and concrete products
331		Primary metal products, ferrous
335		Primary metal products, non-ferrous
341		Metal cans and shipping containers
342		Cutlery, hand tools and hardware
345		Metal plumbing fixtures and heating equipment, except electric and warm air
344		Fabricated structural metal products
345		Screw machine products, bolts, nuts, screws, rivets, and washers
346		Metal stampings and forgings
349		Fabricated metal products n.e.c., including ordnance, and coating, engraving, and allied services
351		Engines and turbines
352		Farm and garden machinery and equipment
353		Construction, mining, and materials handling machinery and equipment
354		Metalworking machinery and equipment
355		Special industry machinery
356		General industrial machinery and equipment
357		Office, computing, and accounting machines
358		Refrigeration and service industry machinery
359		Machinery, except electrical, n.e.c.
365		Household electrical appliances
364		Electrical lighting and wiring equipment
366		Radio, television, and communication equipment
367		Electronic components and accessories
369		Electrical machinery, n.e.c.
371		Motor vehicles and equipment
379		Other transportation equipment, n.e.c.
381		Scientific instruments and measuring and controlling devices
385		Optical and ophthalmic goods
384		Surgical, medical, and dental instruments and supplies
386		Photographic equipment and supplies
387		Watches, clocks, and watchcases
390		Miscellaneous manufactured products, n.e.c.
		TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES
444		Petroleum tanker operations
449		Other water transportation
450		Transportation by air
461		Pipeline transportation, including natural gas transmission
479		Transportation, n.e.c.
480		Communication
490		Electric, gas, and sanitary services
		WHOLESALE TRADE
501		Motor vehicles and automotive parts and supplies
505		Lumber and other construction materials
504		Metals and minerals, except petroleum
505		Electrical goods
506		Hardware, plumbing and heating equipment and supplies
507		Machinery, equipment and supplies, except farm and garden
508		Farm and garden machinery and equipment
509		Miscellaneous durable goods, n.e.c.
511		Paper and paper products
512		Drugs and chemicals and allied products
515		Apparel, piece goods, and notions
514		Groceries and related products
515		Farm-product raw materials
512		Petroleum and petroleum products
519		Miscellaneous non-durable goods, n.e.c.
		RETAIL TRADE
520		Retail trade, except food stores
524		Food stores
		FINANCE, INSURANCE, AND REAL ESTATE
600		Banking
610		Credit agencies other than banks
620		Security and commodity brokers, dealers, exchanges, and services and investment offices
630		Insurance carriers, agents, brokers, and services
650		Real estate
660		Combinations of real estate, insurance, loans, and law offices
670		Holding companies
		SERVICES
700		Hotels, rooming houses, camps, and other lodging places
731		Advertising
760		Motion pictures, including television tape and film
891		Engineering, architectural, and surveying services
893		Accounting, auditing, and bookkeeping services
899		Other personal and business services, n.e.c.

Pa II – LISTING OF FORMS BE-10B FILED IN THIS SURVEY

19.	Serial number (Same as on Form BE-10B, Item 2) (a)	Full name of foreign affiliate (Same as it appears in Item 3, Form BE-10B) bearing the serial number entered in column (a) (b)	Country of location of foreign affiliate (Same as 20 Form BE-10B, Item 9) (c)
NOTED			A-3

Since more than one Form BE-10B may be filed for a given foreign affiliate, an affiliate's name may appear more than once, but the Forms BE-10B filed by a U.S. Reporter should be numbered serially beginning with number 1, and numbers should not be repeated.

Part III – FINANCIAL SCHEDULES – (Insurance companies, banks, or airline stations, see special instructions, page 4)

REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

Important - Notice

Dollar figures should be reported as illustrated.

EXAMPLE: If figure is $2,225,750,000.00 →

Billions (000)	Millions (000)	Thousands (000)
2,	225,	750

BALANCE SHEET	Closing and opening balances		INCOME STATEMENT	For the year
	Closing (a)	Opening (b)		(c)
* ASSETS *			* INCOME *	
16. Cash items – Deposits in financial institutions, and other cash items	$	$	37. Net sales or gross operating revenues – Net sales (sales minus returns, allowances, and discounts) or gross operating revenues, both inclusive of sales or consumption taxes levied directly on the consumer, and excise taxes levied on manufacturers, wholesalers, and retailers	$
17. Trade accounts and notes receivable – Net of allowances for doubtful items			38. Sales taxes – The amount included in "Net sales or gross operating revenues," Item 37, which represents sales or consumption taxes levied directly on the consumer, and excise taxes levied on manufacturers, wholesalers, and retailers	
18. Other current receivables – Net of allowances for doubtful items			39. Net sales or gross operating revenues excluding sales taxes (Item 37 minus Item 38)	
19. Inventories – Excluding land held for resale			40. Equity in net income of foreign affiliates – Equity in net income after foreign income taxes, of reported foreign affiliates for which an equity investment is reported in Item 23	
20. Other current assets – Include land held for resale and other current assets not included above.			41. Other income – Realized and unrealized gains resulting from changes in exchange rates (indicate at the time they are recognized), gains on sales of property, plant, and equipment items, other extraordinary gains, non-operating income, and other income not included above – Specify	
21. Property, net – Land, timber and mineral rights, owned by U.S. Reporter, including those leased to others by U.S. Reporter, at historical cost, net of accumulated depletion and like charges. Exclude intangible assets, land held for resale, and capitalized exploration and development costs.			42. TOTAL INCOME (Sum of items 39, 40 and 41)	$
22. Plant and equipment, net – Plant and equipment, owned by U.S. Reporter, including those leased to others by U.S. Reporter, at historical cost, net of accumulated depreciation, depletion, and like charges. Include all structures, machinery, and equipment, including special tools, construction in progress, and capitalized exploration and development costs. Exclude intangible assets			COSTS AND EXPENSES	
23. Equity investment in foreign affiliates – Which U.S. Reporter is reporting as a parent – Equity investment, including equity in undistributed earnings since acquisition of U.S. Reporter in his foreign affiliates, including foreign branches.			43. Cost of goods sold – Operating expenditures which relate to net sales or gross operating revenues including sales taxes (Item 39). Include production royalty payments to Federal, State, and local governments, their subdivisions and agencies. Include depletion charges representing the amortization of the actual cost of capital assets, but exclude all other depletion charges	
24. Other non-current assets – Intangible assets, net of amortization, and other non-current assets not included above			44. Selling, general and administrative expenses	
25. TOTAL ASSETS – (Sum of items 16 through 24, must equal sum of items 33 and 52)	$	$	45. U.S. income taxes – Provision for Federal, State, and local income taxes for the reporting period. Exclude production royalty payments to Federal, State, and local governments, their subdivisions and agencies.	
* LIABILITIES *			46. Other costs and expenses – Realized and unrealized losses resulting from changes in exchange rates (indicate at the time they are recognized), losses on retirement or sale of property, plant and equipment items, other extraordinary losses, non-operating expenses, underlying minority interest in profits which arise out of consolidating more than one domestic affiliate and other costs and expenses not included above. (However, the equity of a direct minority interest in the U.S. Reporter is not to be separated from the normal income accounts.) – Specify	
26. Trade accounts and notes payable	$	$		
27. Current portion of long-term debt				
28. Other current liabilities – Other current liabilities, not included above, having maturity of one year or less at original				
29. Long-term debt (excluding current portion) – Debt having an original maturity of more than one year, excluding current portion due				
30. Other liabilities – All liabilities which cannot be classified according to original maturity or due date. Include any underlying minority interest which arises out of the consolidation of more than one domestic affiliate of the U.S. Reporter. (However, the equity of a direct minority ownership interest in the U.S. Reporter is not to be separated from the normal equity accounts.)				
31. TOTAL LIABILITIES (Sum of items 26 through 30)	$	$		
* OWNERS' EQUITY *				
32. TOTAL OWNERS' EQUITY (Equals item 25 minus item 31)	$	$		
FOREIGN ASSETS AND LIABILITIES				
Foreign assets – That portion of total assets, item 25, that are claims on foreigners. Include, for example, foreign bank accounts, foreign securities, equity investment in reported foreign affiliates (item 23), intercompany claims on foreign affiliates, receivables from foreigners for exports, and the qualified assets of Domestic International Sales Companies			47. TOTAL COSTS AND EXPENSES (Sum of items 43 through 46)	$
33. Foreign assets which pertain to reported foreign affiliates	$	$	* NET INCOME *	
34. All other foreign assets			48. Net income – After provision for income taxes, but before dividends on common and preferred stock (Item 42 minus Item 47)	$
Foreign liabilities – That portion of total liabilities, item 31, that are liabilities to foreigners. Include, for example, intercompany debt to foreign affiliates and payables to foreigners for imports. Include the foreign liabilities of Domestic International Sales Companies				
35. Liabilities to reported foreign affiliates				
36. All other liabilities to foreigners	$	$		

combined into one category and set a. zero b. accum. dep. etc

A-4

Part III – FINANCIAL SCHEDULES – Continued – REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

SUPPLEMENTARY DATA	For the year
49. Dividends received – Dividends, in cash or kind, on both common and preferred stock, received by or credited to U.S. Reporter by any payor, net of tax withheld at the source, but excluding stock and liquidating dividends	$
50. Interest received – Total received by or credited to U.S. Reporter by any payor, net of tax withheld at the source	
51. Interest paid – Total interest paid, gross of tax withheld, by U.S. Reporter to all payees	
52. Production royalty payments – Payments to Federal, State, and local governments, their subdividions and agencies of production royalties for natural resources	
53. Taxes (other than income and payroll taxes) and non-tax payments to governments (other than production royalty payments) – Include tax liabilities other than income and payroll taxes, net of refunds or credits, paid or accrued to Federal, State, and local governments, their subdividions and agencies, by U.S. Reporter for the year. Include sales, consumption, and excise taxes, property and other taxes on the value of assets and capital, any remaining taxes (other than income and payroll taxes), and all payments of non-tax liabilities to Federal, State, and local governments, their subdivisions and agencies (except production royalty payments), such as import and export duties, license fees, fines and penalties, and similar items.	
54. Research and development (R&D) expenditures, total – Include all costs incurred including depreciation, wages and salaries, taxes, cost of materials and supplies, and allocated overhead (but excluding capital expenditures) by U.S. Reporter to support R&D performed in facilities owned or operated by U.S. Reporter for its own benefit, and costs of R&D performed by U.S. Reporter for others on contract. Exclude costs of R&D performed for this U.S. Reporter by others. (Include costs of R&D performed	
55. Federally funded research and development – That part of research and development expenditures, total, as shown in item 54, funded by the Federal government under research and development contracts or subcontracts or under R&D portions of procurement contracts and subcontracts. Exclude any such R&D that you subcontracted out to other R&D organizations.	
56. Payments of fees and royalties to foreign persons other than foreign affiliates of U.S. Reporter – Include royalties, license fees, and other payments for use or sale of intangible property paid or accrued by U.S. Reporter.	
57. Receipts of fees and royalties from foreign persons other than foreign affiliates of the U.S. Reporter – Include royalties, license fees, and other receipts for use or sale of intangible property paid or accrued to U.S. Reporter.	
58. Expenditures for property – Expenditures for the acquisition of land, and timber and mineral rights, both for those used by U.S. Reporter and leased to others by U.S. Reporter, but excluding those for intangible assets, land held for resale, and capitalized exploration and development costs; covers property items charged to the balance sheet net property account, item 21.	
59. Expenditures for plant and equipment – Expenditures for acquisition and improvement of structures, machinery, and equipment, both for those used by U.S. Reporter and leased to others by U.S. Reporter. Include those for special tools, construction in progress, and capitalized exploration and development costs, but excluding those for expensed repairs, and intangible assets; covers these plant and equipment items charged to the balance sheet net plant and equipment account, item 22.	
60. Depletion, etc. – Charge to the income statement relating to gross cost of property included in item 21.	
61. Depreciation, etc. – Charge to the income statement relating to gross cost of plant and equipment included in item 22. ↗	$

PETROLEUM AND MINING EXPLORATION AND DEVELOPMENT EXPENDITURES	For the year
62. Total exploration and development expenditures – (Sum of items 63 and 64)	$
63. Charged against income – (Included in item 43 or 46)	
64. Capitalized – (Included in item 22)	

EMPLOYMENT AND EMPLOYEE COMPENSATION

In addition to employment and employee compensation relating to current operations, employment and employee compensation data are to be reported inclusive of those employees, and their associated costs, who are engaged in an activity, the value of which was capitalized. See general instructions page for requirements and definitions.

• EMPLOYMENT •	Employees Enter actual number of employees
65. Total employment – The equivalent to the average number of full-time employees for the year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or released during the year should also be included at the appropriate percentage. (Sum of items 66 and 67)	
66. Production workers – Employees reported in item 65 who are engaged in production or related activities at or below the working supervisory level	
67. Non-production workers – Employees reported in item 65 who are not engaged in production or related activities (Sum of items 68 through 71)	
68. Managerial employees – Non-production workers engaged in management activities, excluding managers engaged in R&D work	
69. Research and development scientists and engineers, including managers engaged in R&D work	
70. Other professional and technical employees – Non-production workers engaged in professional and technical work other than research and development or managerial activities	
71. Other non-production workers (Item 67 minus sum of items 68, 69, and 70) ✓	

• EMPLOYEE COMPENSATION •	Compensation: Total (a)	Production workers (b)	Non-production workers (c)
72. Employee compensation – Include all payments to and all other costs incurred on behalf of, or for the benefit of, all employees. Include payments in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary. (Sum of items 73, 74, and 75)	$	$	$
73. Wages and salaries – Include employees' gross earnings (before any payroll deductions), vacation, dismissal and sick pay, paid bonuses, commissions except to independent sales personnel, and the cash equivalent of wages and salaries paid in kind			
74. Cost of employee benefit plans – Include costs for plans (whether legally required or voluntary) such as employer contributions to social insurance funds, group health and life insurance, private pension, supplemental unemployment compensation, deferred profit sharing, etc.			
75. Other labor costs – Include those costs for such items as vacation and recreational facilities, employee training programs, in-house medical facilities, free parking, discounts on employees' purchases, operating losses on company-owned cafeterias, etc.	$	$	$

SUPPLEMENTAL INSTRUCTIONS FOR U.S. REPORTERS WHICH ARE INSURANCE COMPANIES, BANKS, OR AIRLINES – These special instructions are intended to supplement or supplant the instructions given elsewhere on the form. If problems should arise in applying these instructions or in reporting other specific items, please contact this Bureau at (202) 523-0632.

• INSURANCE COMPANIES •

When there is a difference, the Financial Schedules are to be prepared on the same basis as an annual report to the stockholders, rather than on the basis of an annual statement to an insurance department. Valuation should be according to normal commercial accounting procedures, not at the rates promulgated by the National Association of Insurance Commissioners. Include the assets not acceptable for the annual statement to an insurance department.

Items

17 Trade accounts and notes receivable – Include current items such as agents' balances or uncollected premiums, amounts recoverable from reinsurers, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

26 Trade accounts and notes payable – Include current items such as loss liabilities, policy claims, commissions due, and other current liabilities arising from the ordinary course of business. (Policy reserves are to be included in "Other liabilities," item 30, unless they are clearly current liabilities.)

37 Net sales or gross operating revenues – Include items such as earned premiums, annuity considerations, gross investment income, and items of a similar nature. Exclude income from foreign affiliates which is to be reported in item 40.

• INSURANCE COMPANIES – Continued •

Items

43 Cost of goods sold – Include costs relating to net sales or gross operating revenues, item 37, such as policy losses incurred, death benefits, matured endowments, other policy benefits, increases in liabilities for future policy benefits, other underwriting expenses, and investment expenses.

• BANKS •

17 Trade accounts and notes receivable – Include current items such as current portion of loans, customer's liability to the bank on outstanding acceptances, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

26 Trade accounts and notes payable – Include current items such as deposits, acceptances, and other current liabilities arising from the ordinary course of business.

• AIRLINES •

Exclude from domestic data any data included on the foreign affiliates' Forms BE-10B.

A-5

Part III - FINANCIAL SCHEDULES - Continued - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

MERCHANDISE TRADE WITH FOREIGNERS OTHER THAN FOREIGN AFFILIATES OF U.S. REPORTER	SITC codes	Exports			Imports
			Shipped by U.S. Reporter to foreigners other than foreign affiliates of U.S. Reporter (Valued f.a.s., U.S. port)		Shipped to U.S. Reporter by foreigners other than foreign affiliates of U.S. Reporter (Valued f.o.b. foreign port)
		Total (a)	Products of U.S. Reporter (b)	Products of others (c)	(d)
76. Merchandise trade of U.S. Reporter with foreigners other than foreign affiliates of the U.S. Reporter, total - (Equals the sum of items 77 through 86 and also equals the sum of items 87 through 125)		$	$	$	$
BY PRODUCT (See Exports and Imports Trade Classifications' portion of the INDUSTRY CLASSIFICATIONS AND EXPORT AND IMPORT TRADE CLASSIFICATIONS booklet)					
77. Food, beverages, and tobacco	0 - 1				
78. Inedible crude materials, except fuels	2				
79. Petroleum and products, excluding natural gas	33				
80. Chemicals	5				
81. Machinery, electrical and non-electrical	71 - 72				
82. Road motor vehicles and parts	733				
83. Other transportation equipment	73 excluding 732				
84. Metal manufactures	67, 68, and 69				
85. Other manufactures	61 through 66 and 8				
86. All other	3 (excluding 331), 4, and 9	$	$	$	$
BY COUNTRY					
87. Canada		$	$	$	$
Latin American Republics and other Western Hemisphere					
88. Brazil		$	$	$	$
89. Mexico					
90. Venezuela		$	$	$	$
Other Latin American Republics and Western Hemisphere - Specify Country					
91.		$	$	$	$
92.					
93.					
94.					
95.		$	$	$	$
Western Europe					
96. United Kingdom		$	$	$	$
97. France					
98. Germany					
99. Italy					
100. Netherlands					
101. Belgium and Luxembourg					
102. Ireland					
103. Denmark					
104. Sweden					
105. Switzerland		$	$	$	$
Other Western Europe - Specify country					
106.		$	$	$	$
107.					
108.					
109.					
110.					
111. Eastern Europe					
112. Japan					
113. Australia					
114. New Zealand					
115. South Africa		$	$	$	$
Other countries - Specify country					
116.		$	$	$	$
117.					
118.					
119.					
120.					
121.					
122.					
123.					
124.					
125.		$	$	$	$

PARENT FIRM FORM

X'd (crossed out) items are those Bureau of Economic Analysis deleted

Blue X items: BEA was willing to drop

FORM BE-10A
(B-10-74) Draft

U.S. DEPARTMENT OF COMMERCE
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION
BUREAU OF ECONOMIC ANALYSIS

CONFIDENTIAL

SURVEY OF U.S. BUSINESS INVESTMENTS ABROAD - 1975

(Report for U.S. Reporter)

RETURN TO:
Bureau of Economic Analysis
ATTN: International Investment
Division - BE-50(SSB)
5401 K Street, NW, (Tower Building)
U.S. Department of Commerce
Washington, D.C. 20230

NOTICE - The information reported on this form will be used exclusively for statistical purposes. It will be held in strictest confidence by this Bureau, and published only in such aggregates which preclude the disclosure of data supplied by individual Reporters.

Control Number: B-1

Part I - IDENTIFICATION OF U.S. REPORTER

1. Name of U.S. Reporter

2. Form of organization of U.S. Reporter (Mark one)
- [ ] Partnership
- [ ] Individual
- [ ] Estate or trust
- [ ] Corporation
- [ ] Other - Specify _____

3. Employer Identification Number(s) (used to file data on income and payroll taxes)

4. Identity of top parent (Mark one)
- [ ] U.S. Reporter is not owned or controlled by any other U.S. person to the extent of 50% or more of its voting securities. 1-177
- [ ] U.S. Reporter is owned or controlled by another U.S. person to the extent of more than fifty percent (%

Name and address of owner

5. State (or U.S. territory or possession) of incorporation or organization of U.S. Reporter (Mark one)
- [ ] Delaware
- [ ] New York
- [ ] California
- [ ] Illinois
- [ ] Other - Specify _____

6. Location of principal administrative office of Reporter (State, U.S. territory or possession)

7. Number of domestic subsidiaries (owned or controlled to the extent of more than fifty percent)

8. List of consolidation - Report does not consolidate data for the following domestic subsidiaries owned or controlled to the extent of more than fifty percent by U.S. Reporter. (Give name and reason why subsidiary's data are not consolidated.)

	Year (last 2 digits)	Month	Day
9. Reporting period - U.S. Reporter data are for the year ending →			
10. U.S. Reporter terms "Opening Balance" or "Beginning of reporting period" always refer to data as of →			
11. U.S. Reporter terms "Closing Balance" or "End of reporting period" always refer to data as of →			

12. Major activity of U.S. Reporter (Mark one)
- [ ] Extracting of oil or minerals (including exploration and development)
- [ ] Manufacturing (fabricating, assembling, processing)
- [ ] Selling (or distributing) goods
- [ ] Providing a service
- [ ] Other .Specify _____

13. What is the major product or service involved in this activity?

IMPORTANT — Please read carefully all instructions

1. FILING

A completed Form BE-10A is required from the U.S. Reporter covering the fully consolidated U.S. domestic enterprise. Form BE-10A should be filed by the U.S. person which is not owned, to the extent of more than fifty percent of its voting rights, by any other U.S. person. (Exception: When a U.S. business enterprise is owned more than fifty percent by an individual, the report should be filed by the business enterprise rather than the owning individual.) For corporate reporters, the fully consolidated domestic enterprise is defined to include the domestic operations of every corporation which is resident in the United States and is owned to the extent of more than fifty percent of its voting stock by the reporting U.S. corporation and its majority-owned U.S. corporations. Consolidate every Domestic International Sales Corporation which is owned to the extent of more than fifty percent of its voting stock. Do not consolidate data for foreign affiliates on Form BE-10A.

Reports containing Form BE-10A are due within 60 days after publication of the reporting requirements in the Federal Register. If any inquiries call (202) 523-0632.

2. EXEMPTIONS

Partial exemption, Form BE-10A - U.S. Reporters who are religious, charitable, or other nonprofit organizations or who are individuals, are required to file a BE-10A report, but are exempt from filing the PART III, FINANCIAL SCHEDULES OF Form BE-10A.

3. GENERAL NOTES

a. Currency amounts should be reported in U.S. dollars and rounded to the nearest thousand.

b. If an item is between $ 500.00 enter "0."

c. Use parentheses to indicate negative numbers.

d. Every question on the form should be answered except where reporting is specifically exempt.

e. In PART I, IDENTIFICATION OF U.S. REPORTER, the instruction "Mark one" is often given. When you find it necessary to mark more than one answer, provide an explanation.

f. All questions should be answered in the context of the reporting period for the U.S. Reporter (see items 9, 10, and 11) unless another time period is specified in the instructions.

PERSON TO CONSULT CONCERNING QUESTIONS ABOUT THIS REPORT: Name | Title | Telephone: Area code | Number | Extension

CERTIFICATION: The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report (including Forms BE-10A and BE-10B and any statements attached hereto) is correct and complete to the best of their knowledge and belief.

Name of company | Date | Signature of authorized official | Title

The U.S. Code, Title 18 (Crimes and Criminal Procedure), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction. Persons who have access to individual company information are subject to penalties for unauthorized disclosure.

B-2

Part I - IDENTIFICATION OF U.S. REPORTER - Continued

14. Percent of U.S. Reporter's net sales (as reported in item 39, part III) accounted for by each classification. Account for all classifications which comprise five percent or more of net sales; account for no less than seventy-five percent of net sales. (Holding companies should use total income.) See the "Industry Classifications" in the INDUSTRY CLASSIFICATIONS AND EXPORT AND IMPORT TRADE CLASSIFICATIONS booklet for a full description of each industry.

Code (a)	Percent of sales (b)	Industry (c)
		AGRICULTURE, FORESTRY, AND FISHING
010		Agricultural production - crops
020		Agricultural production - livestock
070		Agricultural services
080		Forestry
090		Fishing, hunting, and trapping
		MINING
101		Iron
102		Copper, lead, zinc, gold and silver
105		Bauxite and other aluminum ores
109		Other metallic ores and metal mining services
120		Coal and other nonmetallic minerals, except oil and gas
131		Crude petroleum extraction (no refining) and natural gas
138		Oil and gas field services
		CONSTRUCTION
150		Contastruction
		MANUFACTURING
201		Meat products
202		Dairy products
203		Canned and preserved fruits and vegetables
204		Grain mill products
208		Beverages
209		Other food and kindred products
210		Tobacco manufactures
220		Textile mill products
230		Apparel and other finished products made from fabrics and similar materials
240		Lumber and wood products, except furniture
250		Furniture and fixtures
262		Pulp, paper and board mills
264		Miscellaneous converted paper products
265		Paperboard containers and boxes
270		Printing, publishing, and allied industries
281		Industrial chemicals, plastics materials, and synthetics
283		Drugs
284		Soap, cleaners and toilet goods
285		Paints and allied products
287		Agricultural chemicals
289		Chemical products, n.e.c.
291		Integrated petroleum refining and extraction
292		Petroleum refining without extraction
299		Petroleum and coal products, n.e.c.
301		Rubber products
307		Miscellaneous plastics products
310		Leather and leather products
321		Glass products
329		Stone, clay, cement, and concrete products
331		Primary metal products, ferrous
335		Primary metal products, non-ferrous
341		Metal cans and shipping containers
342		Cutlery, hand tools and hardware
343		Metal plumbing fixtures and heating equipment, except electric and warm air
344		Fabricated structural metal products
345		Screw machine products, bolts, nuts, screws, rivets, and washers
346		Metal stampings and forgings
349		Fabricated metal products n.e.c., including ordnance, and coating, engraving, and allied services
351		Engines and turbines
352		Farm and garden machinery and equipment
353		Construction, mining, and materials handling machinery and equipment
354		Metalworking machinery and equipment
355		Special industry machinery
356		General industrial machinery and equipment
357		Office, computing, and accounting machines
358		Refrigeration and service industry machinery
359		Machinery, except electrical, n.e.c.
363		Household electrical appliances
364		Electrical lighting and wiring equipment
366		Radio, television, and communication equipment
367		Electronic components and accessories
369		Electrical machinery, n.e.c.
371		Motor vehicles and equipment
379		Other transportation equipment, n.e.c.
381		Scientific instruments and measuring and controlling devices
383		Optical and ophthalmic goods
384		Surgical, medical, and dental instruments and supplies
386		Photographic equipment and supplies
387		Watches, clocks, and watchcases
390		Miscellaneous manufactured products, n.e.c.
444		TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES
449		Petroleum tanker operations
450		Other water transportation
461		Transportation by air
479		Pipeline transportation, including natural gas transmission
480		Transportation, n.e.c.
490		Communication
		Electric, gas, and sanitary services
505		WHOLESALE TRADE
504		Motor vehicles and automotive parts and supplies
505		Lumber and other construction materials
506		Metals and minerals, except petroleum
507		Electrical goods
508		Hardware, plumbing and heating equipment and supplies
509		Machinery, equipment and supplies, except farm and garden
511		Farm and garden machinery and equipment
512		Miscellaneous durable goods, n.e.c.
515		Paper and paper products
514		Drugs and chemicals and allied products
515		Apparel, piece goods, and notions
516		Groceries and related products
517		Farm-product raw materials
518		Petroleum and petroleum products
519		Miscellaneous non-durable goods, n.e.c.
520		RETAIL TRADE
524		Retail trade, except food stores
600		Food stores
610		FINANCE, INSURANCE, AND REAL ESTATE
620		Banking
630		Credit agencies other than banks
650		Security and commodity brokers, dealers, exchanges, and services and investment offices
660		Insurance carriers, agents, brokers, and services
670		Real estate
		Combinations of real estate, insurance, loans, and law offices
700		Holding companies
		SERVICES
751		Hotels, rooming houses, camps, and other lodging places
780		Advertising
899		Motion pictures, including television tape and film
895		Engineering, architectural, and surveying services
899		Accounting, auditing, and bookkeeping services
		Other personal and business services, n.e.c.

FORM OE-10B (8-15-79)Prev
A

B-3

Part II - LISTING OF FORMS BE-10B FILED IN THIS SURVEY

No.	Serial number (Same as on Form BE-10B, Item 2) (a)	Full name of foreign affiliate (Same as it appears in Item 3, Form BE-10B) bearing the serial number entered in column (a) (b)	Country of location of foreign affiliate (Same as on Form BE-10B, Item 9) (c)

NOTE!

Since more than one Form BE-10B may be filed for a given foreign affiliate, an affiliate's name may appear more than once, but the Forms BE-10B filed by a U.S. Reporter should be numbered serially beginning with number 1, and numbers should not be repeated.

Part III - FINANCIAL SCHEDULES - (Insurance companies, banks, or airline stations, see special instructions, page 4)

REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

Important Notice

Dollar figures should be reported as illustrated.

EXAMPLE: If figure is $2,225,750,000.00 →

Billions (000)	Millions (000)	Thousands (000)
2,	225,	750

combine into one category + get: a. gross b. Chem. dyn. etc

BALANCE SHEET	Closing and opening balances		INCOME STATEMENT	For the year
ASSETS	Closing (a)	Opening (b)	INCOME	(a)
16. Cash items - Deposits in financial institutions, and other cash items	$	$	37. Net sales or gross operating revenues - Net sales (sales minus returns, allowances, and discounts) or gross operating revenues, both inclusive of sales or consumption taxes levied directly on the consumer, and excise taxes levied on manufacturers, wholesalers, and retailers	$
17. Trade accounts and notes receivable - Net of allowances for doubtful items			38. Sales taxes - The amount included in Net sales or gross operating revenues, item 37, which represents sales or consumption taxes levied directly on the consumer, and excise taxes levied on manufacturers, wholesalers, and retailers	
18. Other current receivables - Net of allowances for doubtful items			39. Net sales or gross operating revenues excluding sales taxes (Item 37 minus Item 38)	
19. Inventories - Excluding land held for resale			40. Equity in net income of foreign affiliate - Equity in net income after foreign income taxes, of reported foreign affiliates for which an equity investment is reported in Item 25	
20. Other current assets - Include land held for resale and other current assets not included above.			41. Other income - Realized and unrealized gains resulting from changes in exchange rates (included at the time they are recognized), gains on sales of property, plants and equipment items, other extraordinary gains, non-operating income, and other income not included above - Specify a	
21. Property, net - Land, timber and mineral rights, owned by U.S. Reporter, including those leased to others by U.S. Reporter, at historical cost, net of accumulated depletion and like charges. Exclude intangible assets, land held for resale, and capitalized exploration and development costs.				
22. Plant and equipment, net - Plant and equipment, owned by U.S. Reporter, including those leased to others by U.S. Reporter, at historical cost, net of accumulated depreciation, depletion, and like charges. Include all structures, machinery, and equipment, including special tools, construction in progress, and capitalized exploration and development costs. Exclude intangible assets.				
23. Equity investment in foreign affiliates which U.S. Reporter is reporting as a parent - Equity investment, including equity in undistributed earnings since acquisition of U.S. Reporter in its foreign affiliates, including foreign branches.				
24. Other non-current assets - Intangible assets, net of amortization, and other non-current assets not included above				
25. TOTAL ASSETS - (Sum of items 16 through 24, must equal sum of items 31 and 32)	$	$	A2. TOTAL INCOME (Sum of items 39, 40, and 41)	$
LIABILITIES			COSTS AND EXPENSES	
26. Trade accounts and notes payable	$	$	43. Cost of goods sold - Operating expenditures which relate to net sales or gross operating revenues excluding sales taxes (item 39). Include production royalty payments to Federal, State, and local governments, their subdivisions and agencies. Include depletion charges representing the amortization of the actual cost of capital assets, but exclude all other depletion charges.	
27. Current portion of long-term debt				
28. Other current liabilities - Other current liabilities, not included above, having maturity of one year or less an original			44. Selling, general and administrative expenses	
29. Long-term debt (excluding current portion) - Debt having an original maturity of more than one year, excluding current portion due			45. U.S. income taxes - Provision for Federal, State, and local income taxes for the reporting period. Exclude production royalty payments to Federal, State, and local governments, their subdivisions and agencies.	
30. Other liabilities - All liabilities which cannot be classified according to original maturity or due date. Include any underlying minority interest which arises out of the consolidation of more than one domestic affiliate of the U.S. Reporter. (However, the equity of a direct minority ownership interest in the U.S. Reporter is not to be separated from the normal equity accounts.)			46. Other costs and expenses - Realized and unrealized losses resulting from changes in exchange rates (included at the time they are recognized), losses on retirement or sale of property, plant and equipment items, other extraordinary losses, non-operating expenses, underlying minority interest in profits which arise out of consolidating more than one domestic affiliate and other costs and expenses not included above. (However, the equity of a direct minority interest in the U.S. Reporter is not to be separated from the normal income accounts.) - Specify a	
31. TOTAL LIABILITIES (Sum of items 26 through 30)	$	$		
OWNERS' EQUITY				
32. TOTAL OWNERS' EQUITY (Equals item 25 minus item 31)	$	$		
FOREIGN ASSETS AND LIABILITIES			47. TOTAL COSTS AND EXPENSES (Sum of items 43 through 46)	$
Foreign assets - That portion of total assets, item 25, that are claims on foreigners, include, for example, foreign bank accounts, foreign securities, equity investment in reported foreign affiliates (item 25), intercompany claims on foreign affiliates, receivables from foreigners for exports, and the qualified assets of Domestic International Sales Companies			NET INCOME	
			48. Net income - After provision for income taxes, but before dividends on common and preferred stock (item 42 minus item 47)	$
33. Foreign assets which pertain to reported foreign affiliates	$	$		
34. All other foreign assets				
Foreign liabilities - That portion of total liabilities, item 31, that are liabilities to foreigners, include, for example, intercompany debt to foreign affiliates and payables to foreigners for imports. Include the foreign liabilities of Domestic International Sales Companies				
35. Liabilities to reported foreign affiliates				
36. All other liabilities to foreigners	$	$		

B-4

Part III — FINANCIAL SCHEDULES - Continued - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

SUPPLEMENTARY DATA	For the year
49. Dividends received - Dividends, in cash or kind, on both common and preferred stock, received by or credited to U.S. Reporter by any payor, net of tax withheld at the source, but excluding stock and liquidating dividends	$
50. Interest received - Total received by or credited to U.S. Reporter by any payor, net of tax withheld at the source	
51. Interest paid - Total interest paid, gross of tax withheld, by U.S. Reporter to all payees	
52. Production royalty payments - Payments to Federal, State, and local governments, their subdivisions and agencies of production royalties for natural resources	
53. Taxes (other than income and payroll taxes) and non-tax payments to governments (other than production royalty payments) - Include tax liabilities other than income and payroll taxes, net of refunds or credits, paid or accrued to Federal, State, and local governments, their subdivisions and agencies, by U.S. Reporter for the year. Include sales, consumption, and excise taxes, property and other taxes on the value of assets and capital, any remaining taxes (other than income and payroll taxes), and all payments of non-tax liabilities to Federal, State, and local governments, their subdivisions and agencies (except production royalty payments), such as import and export duties, license fees, fines and penalties, and similar items.	
54. Research and development (R&D) expenditures, total - Include all costs incurred including depreciation, wages and salaries, taxes, cost of materials and supplies, and allocated overhead (but excluding capital expenditures) by U.S. Reporter to support R&D performed in facilities owned or operated by U.S. Reporter for its own benefit, and costs of R&D performed by U.S. Reporter for others on contract. Exclude costs of R&D performed for this U.S. Reporter by others. (Include costs of R&D performed	
55. Federally funded research and development - That part of research and development expenditures, total, as shown in item 54, funded by the Federal government under research and development contracts or subcontracts or under R&D portions of procurement contracts and subcontracts. Exclude any such R&D that you subcontracted out to other R&D organizations.	
56. Payments of fees and royalties to foreign persons other than foreign affiliates of U.S. Reporter - Include royalties, license fees, and other payments for use or sale of intangible property paid or accrued by U.S. Reporter.	
57. Receipts of fees and royalties from foreign persons other than foreign affiliates of the U.S. Reporter - Include royalties, license fees, and other receipts for use or sale of intangible property paid or accrued to U.S. Reporter.	
58. Expenditures for property - Expenditures for the acquisition of land, timber and mineral rights, both for those used by U.S. Reporter and leased to others by U.S. Reporter, but excluding those for intangible assets, land held for resale, and capitalized exploration and development costs; covers property items charged to the balance sheet net property account, item 21.	
59. Expenditures for plant and equipment - Expenditures for acquisition and improvement of structures, machinery, and equipment, both for those used by U.S. Reporter and leased to others by U.S. Reporter. Include those for special tools, construction in progress, and capitalized exploration and development costs, but excluding those for expensed repairs, and intangible assets; covers those plant and equipment items charged to the balance sheet net plant and equipment account, item 22.	
60. Depletion, etc. - Charge to the income statement relating to gross cost of property included in item 21.	Combine
61. Depreciation, etc. - Charge to the income statement relating to gross cost of plant and equipment included in item 22.	$60461

PETROLEUM AND MINING EXPLORATION AND DEVELOPMENT EXPENDITURES	For the year
62. Total exploration and development expenditures - (Sum of items 63 and 64)	$
63. Charged against income - (Included in item 43 or 46)	
64. Capitalized - (Included in item 22)	

EMPLOYMENT AND EMPLOYEE COMPENSATION

In addition to employment and employee compensation relating to current operations, employment and employee compensation data are to be reported inclusive of those employees, and their associated costs, who are engaged in an activity, the value of which was capitalized. See general instructions page for requirements and definitions.

• EMPLOYMENT •	Employees Enter actual number of employees
65. Total employment - The equivalent to the average number of full-time employees for the year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or released during the year should also be included at the appropriate percentage. (Sum of items 66 and 67)	
66. Production workers - Employees reported in item 65 who are engaged in production or related activities at or below the working supervisory level	
67. Non-production workers - Employees reported in item 65 who are not engaged in production or related activities (Sum of items 68 through 71)	
68. Managerial employees - Non-production workers engaged in management activities, excluding managers engaged in R&D work	
69. Research and development scientists and engineers, including managers engaged in R&D work	
70. Other professional and technical employees - Non-production workers engaged in professional and technical work other than research and development or managerial activities	
71. Other non-production workers (item 67 minus sum of items 68, 69, and 70) ✓	

• EMPLOYEE COMPENSATION •	Compensation: Total (a)	Production workers (b)	Non-production workers (c)
72. Employee compensation - Include all payments to and all other costs incurred on behalf of, or for the benefit of, all employees. Include payments in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary. (Sum of items 73, 74, and 75)	Redefined $	to = $	73 + 74 $
73. Wages and salaries - Include employees' gross earnings (before any payroll deductions), vacation, dismissal and sick pay, paid bonuses, commissions except to independent sales personnel, and the cash equivalent of wages and salaries paid in kind			
74. Cost of employee benefit plans - Include costs for plans (whether legally required or voluntary) such as employer contributions to social insurance funds, group health and life insurance, private pension, supplemental unemployment compensation, deferred profit sharing, etc.			
75. Other labor costs - Include those costs for such items as vacation and recreational facilities, employee training programs, in-house medical facilities, free parking, discounts on employees' purchases, operating losses on company-owned cafeterias, etc.	$	$	$

SUPPLEMENTAL INSTRUCTIONS FOR U.S. REPORTERS WHICH ARE INSURANCE COMPANIES, BANKS, OR AIRLINES - These special instructions are intended to supplement or supplant the instructions given elsewhere on the form. If problems should arise in applying these instructions or in reporting other specific items, please contact this Bureau at (202) 523-0632.

• INSURANCE COMPANIES •

When there is a difference, the Financial Schedules are to be prepared on the same basis as an annual report to the stockholders, rather than on the basis of an annual statement to an insurance department. Valuation should be according to normal commercial accounting procedures, not at the rates promulgated by the National Association of Insurance Commissioners. Include the assets not acceptable for the annual statement to an insurance department.

Items

17 Trade accounts and notes receivable - Include current items such as agents' balances or uncollected premiums, amounts recoverable from reinsurers, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

26 Trade accounts and notes payable - Include current items such as loss liabilities, policy claims, commissions due, and other current liabilities arising from the ordinary course of business. (Policy reserves are to be included in "Other liabilities," item 30, unless they are clearly current liabilities.)

37 Net sales or gross operating revenues - Include items such as earned premiums, annuity considerations, gross investment income, and items of a similar nature. Exclude income from foreign affiliates which is to be reported in item 40.

• INSURANCE COMPANIES - Continued •

Items

43 Cost of goods sold - Include costs relating to net sales or gross operating revenues, item 37, such as policy losses incurred, death benefits, matured endowments, other policy benefits, increases in liabilities for future policy benefits, other underwriting expenses, and investment expenses.

• BANKS •

17 Trade accounts and notes receivable - Include current items such as current portion of loans, customer's liability to the bank on outstanding acceptances, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

26 Trade accounts and notes payable - Include current items such as deposits, acceptances, and other current liabilities arising from the ordinary course of business.

• AIRLINES •

Exclude from domestic data any data included on the foreign affiliates' Forms BE-10B.

B-5

Part III - FINANCIAL SCHEDULES - Continued - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

MERCHANDISE TRADE WITH FOREIGNERS OTHER THAN FOREIGN AFFILIATES OF U.S. REPORTER		Exports			Imports
		Shipped by U.S. Reporter to foreigners other than foreign affiliates of U.S. Reporter (Valued f.a.s. U.S. port)			Shipped to U.S. Reporter by foreigners other than foreign affiliates of U.S. Reporter (Valued f.o.b. foreign port)
		Total (a)	Products of U.S. Reporter (b)	Products of others (c)	(d)
76. Merchandise trade of U.S. Reporter with foreigners other than foreign affiliates of the U.S. Reporter, total - (Equals the sum of items 77 through 86 and also equals the sum of items 87 through 125)		$	$	$	$
BY PRODUCT (See "Export and Import Trade Classifications" portion of the INDUSTRY CLASSIFICATIONS AND EXPORT AND IMPORT TRADE CLASSIFICATIONS booklet)	SITC codes				
77. Food, beverages, and tobacco	0 - 1				
78. Inedible crude materials, except fuels	2				
79. Petroleum and products, excluding natural gas	33				
80. Chemicals	5				
81. Machinery, electrical and non-electrical	71 - 72				
82. Road motor vehicles and parts	732				
83. Other transportation equipment	73 excluding 732				
84. Metal manufactures	67, 68, and 69				
85. Other manufactures	61 through 66 and 8				
86. All other	5 (excluding 55), 4, and 9	$	$	$	$
BY COUNTRY					
87. Canada		$	$	$	$
Latin American Republics and other Western Hemisphere					
88. Brazil		$	$	$	$
89. Mexico					
90. Venezuela		$	$	$	$
Other Latin American Republics and Western Hemisphere Specify country					
91.		$	$	$	$
92.					
93.					
94.					
95.		$	$	$	$
Western Europe					
96. United Kingdom		$	$	$	$
97. France					
98. Germany					
99. Italy					
100. Netherlands					
101. Belgium and Luxembourg					
102. Ireland					
103. Denmark					
104. Sweden					
105. Switzerland		$	$	$	$
Other Western Europe - Specify country					
106.		$	$	$	$
107.					
108.					
109.					
110.					
111. Eastern Europe					
112. Japan					
113. Australia					
114. New Zealand					
115. South Africa		$	$	$	$
Other countries - Specify country					
116.		$	$	$	$
117.					
118.					
119.					
120.					
121.					
122.					
123.					
124.					
125.		$	$	$	$

AFFILIATE FIRM FORM

X'd (crossed out) items are those National Advisory Committee deleted

Red X items are those NAC wanted out DRAFT 8/1/74

FORM BE-10B (Draft)
3-7-74

U.S. DEPARTMENT OF COMMERCE
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION
BUREAU OF ECONOMIC ANALYSIS

CONFIDENTIAL

SURVEY OF U.S. BUSINESS INVESTMENTS ABROAD – 1975

(Report for foreign affiliate)

RETURN TO: Bureau of Economic Analysis
ATTN: International Investment Division -BE-50(SSB)
1401 K STREET, NW. (Tower Building)
U.S. Department of Commerce
Washington, D.C. 20230

NOTICE – The information reported on this form will be used exclusively for statistical purposes. It will be held in strictest confidence by this Bureau, and published only in such aggregates which preclude the disclosure of data supplied by individual Reporters.

Control number C-1

Part I – IDENTIFICATION OF FOREIGN AFFILIATE BEING REPORTED

1. Name of U.S. Reporter of affiliate (Same as on Form BE-10A)

2. Serial Number of form for foreign affiliate (Same as on Form BE-10A)

3. Name of foreign affiliate being reported (Give name as shown in papers of incorporation or equivalent documents)

4. If there has been a name change since 1966, give 1966 name of affiliate

IMPORTANT – Please read Carefully all Instructions

1. FILING – A completed Form BE-10B is required for each foreign business enterprise which was a foreign affiliate of the U.S. Reporter for any part of the year ended December 31, 1975. Multiple reports are required for a single foreign affiliate to report separately the following:

a. Each direct line of ownership in a foreign affiliate which is held by the U.S. Reporter or a foreign affiliate of the U.S. Reporter.

b. Direct financial positions or transactions with the U.S. Reporter when the foreign affiliate is indirectly owned by the U.S. Reporter.

c. Each U.S. Reporter's ownership in a foreign affiliate where two or more such U.S. Reporters jointly own the affiliate (See page of general instructions.)

Reports containing Form BE-10B are due 60 days after publication of the reporting requirements in the Federal Register. If any inquiries, call (202) 523-0532.

2. EXEMPTIONS

Total filing exemption, Form BE-10B or if the foreign affiliate's total assets and net sales or gross operating revenues excluding sales taxes (items 75 and 76) were each less than $250,000.00 no Form BE-10B need be filed for the foreign affiliate. Value is to be determined based on the books of the foreign affiliate translated into U.S. dollars. However, if a foreign affiliate owns another foreign affiliate for which a Form BE-10B must be filed, then a Form BE-10B must also be filed for the foreign parent regardless of the value of the foreign parent's assets or income. That is, all affiliates upward in a chain of ownership must be reported.

Partial reporting exemption, Form BE-10B – If, for a given affiliate, the following four items are each less than $1,000,000, then the Reporter is exempt from completing PART IV, FINANCIAL SCHEDULES for the affiliate.

a. Total assets (Item 73)
b. Net sales or gross operating revenues excluding sales taxes (Item 74)
c. U.S. merchandise exports shipped to the affiliate (Item 75)
d. U.S. merchandise imports from the affiliate (Item 76)

Report these four items for each affiliate in PART III, SELECTED FINANCIAL DATA. Value is to be determined based on the books of the foreign affiliate translated into U.S. dollars. However, if a foreign affiliate owns another foreign affiliate for which a complete Form BE-10B must be filed, then a complete Form BE-10B must also be filed for the foreign parent regardless of the value of the foreign parent's assets, income or U.S. trade. That is, all affiliates upward in a chain of ownership from an affiliate for which a complete report must be filed, must file a complete report.

3. GENERAL NOTES – SPECIAL

a. Currency amounts should be reported in U.S. dollars and be rounded to the nearest thousand.
b. If an item is between $ 500.00, enter "0."
c. Use parentheses to indicate negative numbers.
d. Every question on the form should be answered except where reporting is specifically named. If certain information cannot be supplied because the accounts of the foreign affiliate cannot be obtained, give your best estimate.
e. In PART I, IDENTIFICATION OF FOREIGN AFFILIATE the instruction "Mark one" is often given. When you find it necessary to mark more than one answer, provide an explanation.
f. All questions should be answered in the context of the reporting period for the particular foreign affiliate being reported (see items 15, 16, and 17) unless another time period is specified in the instructions.

5. Level of consolidation (Mark one)

- ☐ This form is for a single foreign affiliate
- ☐ Number of foreign affiliates consolidated (hereinafter considered one affiliate)

NOTE – Do not consolidate affiliates in different countries or different industries. See item for a list of industries. See page of general instructions for limited conditions under which consolidation of affiliates in the same country and the same industry is permitted.

6. Names of all foreign affiliates consolidated (If indicated in item 5)

7. Form of organization of affiliate (Mark one)

- ☐ Branch
- ☐ Corporation
- ☐ Partnership
- ☐ Other – Specify
- ☐ Sole proprietorship

COMMERCE USE ONLY: PPC, IPC, OWN, OAC, AFIL, IND

8. Country of incorporation or organization of affiliate

9. Country of location (Country in which affiliate's physical assets reside or where primary activity is carried out.

10. Line of Ownership being reported (Mark one)

- ☐ Affiliate directly owned by U.S. Reporter (or had direct financial transactions with U.S. Reporter)
- ☐ Affiliate directly owned by another foreign affiliate – Name and serial number

11. Ownership – Percent of voting stock for an incorporated foreign affiliate, or an equivalent interest for an unincorporated foreign affiliate, owned directly by –

	Reporting period	
	Ending (a)	Beginning (b)
a. U.S. Reporter (Named in item 1)	%	%
b. Foreign affiliate (Named in item 10)	%	%
c. Other foreign affiliates of U.S. Reporter	%	%
d. Other U.S. persons	%	%
e. Other foreign persons	%	%
TOTAL	100.0 %	100.0 %

12. If item 11c is filled give names and serial numbers of other foreign affiliate owners as shown on Form BE-10A.

13. If item 11d is filled give names, addresses, and percent of ownership for other U.S. persons owning ten percent or more of the voting rights.

14. Financial schedules filed for affiliate (Mark one)

- ☐ Report contains PART III, SELECTED FINANCIAL DATA and PART IV, FINANCIAL SCHEDULES
- ☐ Report does not include PART III, SELECTED FINANCIAL DATA and PART IV, FINANCIAL SCHEDULES. They are being filed on Form BE-10B, under – Serial number OR company name and address
- ☐ Report does not include PART IV, FINANCIAL SCHEDULES pertaining to affiliate because foreign affiliate's: (a) total assets, (b) net sales or gross operating revenues excluding sales taxes, (c) total merchandise exports received from the United States, and (d) total merchandise exports to the United States, are each less than $3,000,000.00; therefore, the U.S. Reporter is EXEMPT from filing PART IV.

	Year (last 2 digits)	Month	Day
15. Affiliate data are for year ending →			
16. Affiliate data terms "Opening balance" or "Beginning of reporting period" always refer to data as of →			
17. Affiliate data terms "Closing balance" or "End of reporting period" always refer to data as of →			

18. Dates shown in items 15 through 17 refer to books of foreign affiliate. Items 34 through 45, column through , refer to data according to books of parent. (Mark one)

- ☐ Dates for parent's books are exactly the same as dates shown in items 15 through 17
- ☐ Dates for parent's books differ from the dates shown in items 15 through 17 – Explain

C-2

Part I - IDENTIFICATION OF FOREIGN AFFILIATE BEING REPORTED - Continued

19. Major activity of affiliate (Mark one)

- ☐ Extracting of oil or minerals (including exploration and development)
- ☐ Manufacturing (fabricating, assembling, processing)
- ☐ Selling (or distributing) goods
- ☐ Providing a service
- ☐ Other - Specify

20. What is the major product or service involved in this activity?

21. Percent of foreign affiliate's sales (reported in item 7e, PART III) accounted for by each classification. Account for all classifications which comprise five percent or more of net sales; account for no less than seventy-five percent of net sales. (Holding companies should use total income.) See the "Industry Classifications" in the INDUSTRY CLASSIFICATION AND EXPORT AND IMPORT TRADE CLASSIFICATIONS booklet for a full description of each industry.

Code (a)	Percent of sales (b)	Industry (c)
		AGRICULTURE, FORESTRY, AND FISHING
010		Agricultural production - crops
020		Agricultural production - livestock
070		Agricultural services
080		Forestry
090		Fishing, hunting, and trapping
		MINING
101		Iron
102		Copper, lead, zinc, gold and silver
103		Bauxite and other aluminum ores
109		Other metallic ores and metal mining services
120		Coal and other nonmetallic minerals, except oil and gas
131		Crude petroleum extraction (no refining) and natural gas
138		Oil and gas field services
		CONSTRUCTION
150		Construction
		MANUFACTURING
201		Meat products
202		Dairy products
203		Canned and preserved fruits and vegetables
204		Grain mill products
208		Beverages
209		Other food and kindred products
210		Tobacco manufactures
220		Textile mill products
250		Apparel and other finished products made from fabrics and similar materials
240		Lumber and wood products, except furniture
250		Furniture and fixtures
262		Pulp, paper and board mills
264		Miscellaneous converted paper products
265		Paperboard containers and boxes
270		Printing, publishing, and allied industries
281		Industrial chemicals, plastics materials, and synthetics
283		Drugs
284		Soap, cleaners and toilet goods
285		Paints and allied products
287		Agricultural chemicals
289		Chemical products, n.e.c.
291		Integrated petroleum refining and extraction
292		Petroleum refining without extraction
299		Petroleum and coal products, n.e.c.
301		Rubber products
307		Miscellaneous plastics products
310		Leather and leather products
321		Glass products
329		Stone, clay, cement, and concrete products
331		Primary metal products, ferrous
335		Primary metal products, non-ferrous
341		Metal cans and shipping containers
342		Cutlery, hand tools and hardware
343		Metal plumbing fixtures and heating equipment, except electric and warm air
344		Fabricated structural metal products
345		Screw machine products, bolts, nuts, screws, rivets, and washers
346		Metal stampings and forgings
349		Fabricated metal products n.e.c., including ordnance, and coating, engraving, and allied services
351		Engines and turbines
352		Farm and garden machinery and equipment
353		Construction, mining, and materials handling machinery and equipment
354		Metalworking machinery and equipment
355		Special industry machinery
356		General industrial machinery and equipment
357		Office, computing, and accounting machines
358		Refrigeration and service industry machinery
359		Machinery, except electrical, n.e.c.
363		Household electrical appliances
364		Electrical lighting and wiring equipment
366		Radio, television, and communication equipment
367		Electronic components and accessories
369		Electrical machinery, n.e.c.
371		Motor vehicles and equipment
379		Other transportation equipment, n.e.c.
381		Scientific instruments and measuring and controlling devices
383		Optical and ophthalmic goods
384		Surgical, medical, and dental instruments and supplies
386		Photographic equipment and supplies
387		Watches, clocks, and watchcases
390		Miscellaneous manufactured products, n.e.c.
444		Petroleum tanker operations
449		Other water transportation
450		Transportation by air
461		Pipeline transportation, including natural gas transmission
479		Transportation, n.e.c.
480		Communication
490		Electric, gas, and sanitary services
		WHOLESALE TRADE
504		Motor vehicles and automotive parts and supplies
505		Lumber and other construction materials
506		Metals and minerals, except petroleum
505		Electrical goods
506		Hardware, plumbing and heating equipment and supplies
507		Machinery, equipment and supplies, except farm and garden
508		Farm and garden machinery and equipment
509		Miscellaneous durable goods, n.e.c.
511		Paper and paper products
512		Drugs and chemicals and allied products
513		Apparel, piece goods, and notions
514		Groceries and related products
515		Farm-product raw materials
512		Petroleum and petroleum products
519		Miscellaneous nondurable goods, n.e.c.
		RETAIL TRADE
520		Retail trade, except food stores
524		Food stores
		FINANCE, INSURANCE, AND REAL ESTATE
600		Banking
610		Credit agencies other than banks
620		Security and commodity brokers, dealers, exchanges, and services and investment offices
630		Insurance carriers, agents, brokers, and services
650		Real estate
660		Combinations of real estate, insurance, loans, and law offices
670		Holding companies
		SERVICES
700		Hotels, rooming houses, camps, and other lodging places
753		Advertising
780		Motion pictures, including television tape and film
891		Engineering, architectural, and surveying services
893		Accounting, auditing, and bookkeeping services
899		Other personal and business services, n.e.c.

FORM BE-100 (F-7-74) C***

C-3

Part I – IDENTIFICATION OF FOREIGN AFFILIATE BEING REPORTED – Continued

22. Currency translation (Mark one)

- ☐ No single rate of exchange was used for all items
- ☐ The books of foreign affiliate are normally kept in U.S. dollars
- ☐ A single rate of exchange was used to translate all items into thousands of U.S. dollars

Foreign currency unit name

Number units per U.S. dollar

COMMERCE USE ONLY

23. Inventory valuation method (Mark one)

- ☐ LIFO
- ☐ Average cost
- ☐ FIFO
- ☐ Other – Specify

24. Year foreign affiliate was established

Year

25. Establishment of Reporter interest (Enter year in appropriate box)

(Last 2 digits) Year Reporter established affiliate

(Last 2 digits) Year Reporter acquired ten-percent interest or more

26. Name and address of person from whom affiliate was acquired (If after December 31, 1966)

27. Ownership status of affiliate (Mark one)

- ☐ A foreign affiliate of U.S. Reporter during entire reporting period
- ☐ Established by, or a ten-percent or more voting interest was acquired by U.S. Reporter during reporting period
- ☐ Seized or expropriated →
- ☐ Sold – Name and address (Date sold) →
- ☐ Dissolved or liquidated →

Year (Last) Month (2 digits)

28. If seller in item 26 or buyer in item 27 was a foreign person owned by a U.S. person, give name of U.S. person

29. Operating period (Mark one)

- ☐ Operating (i.e., producing goods or services) full 12 months of reporting period
- ☐ Operations began →
- ☐ Operations ended →
- ☐ Operated on a seasonal basis
- ☐ Other – Specify

Year (Last) Month (2 digits)

30. Number of establishments affiliate operates

(An establishment is an economic unit at a single physical location where business is conducted or where services or industrial operations are performed, where accounts and separate economic activities are performed at a single location, each should be considered as a separate establishment if employment in such activity is significant and establishment type data, such as number of employees, hours, wages and salaries, and receipts, are available.)

31. Licensing agreements with U.S. Reporter (Enter number)

Knowhow | Patents | Trademarks | Other – Specify

32. Ownership of other affiliates (Mark appropriate box or enter number)

- ☐ No direct voting ownership in other foreign affiliates of U.S. Reporter
- ☐ Number of directly owned affiliates

33. Name(s) of directly owned affiliate (as shown on Form BE-10A) | Serial number(s)

Part II – INVESTMENT AND TRANSACTIONS BETWEEN PARENT AND FOREIGN AFFILIATE – REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

Banks, insurance companies, securities dealers, brokers, etc. – In order to avoid duplication in U.S. Government statistics, do not include in inter-company transactions or accounts with this foreign affiliate the data on claims and liabilities, and purchases or sales of foreign securities which are reportable on Treasury Foreign Exchange Forms B-1, B-2, B-3, S-1 and/or S-4. Permanent investments and retained earnings, income, fees, and other items remitted or credited between the U.S. Reporter and the foreign affiliate should be reported here on appropriate lines. (Exclude interest and fees relating to the items reportable on the Treasury Foreign Exchange Forms.)

Important Example – Read

Dollar figures should be reported as illustrated.

EXAMPLE: If figure is $1,125,628,000.00 →

Bil-lions (000)	Mil-lions (000)	Thou-sands (000)
1,	125,	628

INVESTMENT BETWEEN PARENT AND AFFILIATE	According to books of affiliate: Closing balance (a)	According to books of affiliate: Opening balance (b)	According to books of parent: Closing balance (c)	According to books of parent: Unrealized gain (loss) due to exchange rate fluctuation during year (d)	According to books of parent: Opening balance (e)
▶ Unincorporated affiliate					
34. Parent's equity – Home office account of a branch, net proprietorship account, or parent's share of partnership accounts, or equity accounts of other unincorporated affiliate	$	$	$	$	$
▶ Incorporated affiliate					
• CURRENT ITEMS •					
35. Current liabilities owed to parent (exclude current portion of long-term debt)					
36. Current portion of long-term debt owed to parent					
37. Current claims due from parent					
• LONG-TERM ITEMS •					
38. Long-term debt owed to parent, excluding current portion					
39. Long-term claims due from parent					
• OWNERS EQUITY ITEMS •					
40. Capital stock of affiliate owned by parent – (When reporting this item according to books of the parent, give the figure which represents the cost to parent of capital stock, including any premium paid, and any capital contributions by parent not resulting in issuance of capital stock. Exclude any equity in undistributed earnings of affiliate since acquisition.)					
41. Parent's equity in additional paid-in-capital					
42. Parent's equity in retained earnings					
43. Parent's equity in surplus reserves – Specify					
44. Capital stock of parent owned by affiliate, including any premium paid					
45. TOTAL (Sum of items 35, 36, 38, 40, 41, 42 and 43 minus sum of items 37, 39, and 44)	$	$	$	$	$

SETTLEMENT OF DEBT	Total (a)	Due to exchange rate fluctuations (b)	Due to other reasons (c)
46. Gain (loss) realized by parent on settlement of debt – Difference between the debt balances according to books of parent minus the amount received or paid by parent in settlement of debt items during the period, which settlement would be reflected in a change in one or more of items 35 through 39	$	$	$

COMMERCE USE ONLY

C-4

Part II – INVESTMENT AND TRANSACTIONS BETWEEN PARENT AND FOREIGN AFFILIATE – Continued – – REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

NET INCREASE (DECREASE) IN PARENT'S EQUITY HOLDINGS IN AFFILIATE This section is to identify which change items result in capital outflows from (capital inflows to) the United States as defined for balance of payments purposes.	According to books of parent Net increase (Decrease) (a)	Means of settlement codes (b)	← EXPLANATION of MEANS OF SETTLEMENT CODE
NOTE – Enter items 48-58 at actual transaction value, the gain or loss necessary to reconcile to change in book value should be entered in item 55.			
47. Unincorporated affiliate enter amount for item 34, column c minus column e. Incorporated affiliate enter amount for item 40, column a minus column e (Equals sum of items 48 through 58)	$	$	1. Cash raised abroad by a U.S. (Delaware) corporation through issuance of long-term debt securities
48. Establishment (total liquidation) of affiliate			
49. Acquisition, partial or total, of an equity interest – From affiliate			
50. From all other foreigners (Specify country of foreign seller if located in a different country from this affiliate)			2. Other cash, exclusive of code 4.
51. From U.S. persons			
52. (Sale), partial or total, of an equity interest – To this affiliate			3. Exchange of stock or other equity for stock
53. To all other foreigners (Specify country of foreign purchaser if located in a different country from this affiliate)			
54. To U.S. persons			4. Exchange of stock or other equity for financial assets other than cash or goods
55. Gain (loss) on sale or liquidation (partial or total) of an equity interest			
56. Capital contributions not resulting in issuance of capital stock			5. Transfer of equipment, inventory or other tangible property
57. Writeup (writedown)			
58. Exchange rate fluctuation during the year			
59. Other – Specify	$	$	6. Transfer of intangible assets, for example, patents, know-how, rights
NET INCREASE (DECREASE) IN AFFILIATE'S EQUITY HOLDINGS IN PARENT			
60. Amount – Item 46, column c minus column e (Equals sum of items 61, 62, and 63)	$	$	7. Capitalization of intercompany accounts
61. Net increase (decrease) resulting from transactions with all foreigners			
62. Net increase (decrease) resulting from transactions with all U.S. persons			8. Other – Specify
63. Other – Specify			
COMMERCE USE ONLY 64. Net capital outflow (equity only)	$		

RECEIPTS AND PAYMENTS OF DIVIDENDS, INTEREST, FEES, ROYALTIES, AND RENTALS Based on books of parent, enter amount the parent of affiliate received from, paid to, or entered into intercompany account with affiliate. Include amounts for which payment was made in kind.	Receipts by parent from affiliate		Payments by parent to affiliate	
	Net of tax withheld (a)	Tax withheld (b)	Net of tax withheld (c)	Tax withheld (d)
65. Dividends on common and preferred stock, paid out of earnings, excluding stock dividends	$	$	$	$
66. Interest				
67. Royalties, license fees, and other fees for the use or sale of intangible property				
68. Rentals for the use of tangible property				
69. Fees for services rendered – including management services, professional or technical services, allocated expenses, etc.				
70. Film or television tape rentals				
71. TOTAL (Sum of items 65 through 70)	$	$	$	$

PARENT'S EQUITY IN AFFILIATE'S NET INCOME	For the year (a)
72. Parent's equity in affiliate's net income after provision for foreign income taxes – Enter parent's portion of net income before depletion charges, except those representing amortization of actual cost of capital assets and before provision for common and preferred dividends. (Include unrealized gains or losses due to exchange rate fluctuations at the time they are recognized.)	$

Part III – SELECTED FINANCIAL DATA OF FOREIGN AFFILIATE – REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

● FINANCIAL DATA ●	Amount (a)
73. Total assets at end of reporting period (Same as item 90, column a)	$
74. Net sales or gross operating revenues excluding sales taxes – Net sales (sales minus returns, allowances, discounts) or gross operating revenues, both exclusive of sales or consumption taxes levied directly on the consumer, net value added taxes, and excise taxes levied on manufacturers, wholesalers, and retailers. (Same as item 110)	
75. U.S. merchandise exports shipped to affiliate, f.a.s. U.S. port (Same as item 153, column a)	
76. U.S. merchandise imports from affiliate, f.a.s. foreign port (Same as item 169, column a)	
77. Owners' equity (or net worth) at end of reporting period (Same as item 97 or item 102, column a)	
78. Net income after provision for foreign income taxes, but before dividends on common and preferred stock (Same as item 119)	
79. Expenditure for property, plant, and equipment – Expenditures for the acquisition and improvement of land, timber, mineral rights, structures, machinery, and equipment, for affiliate's own use or for lease to others, including those for mineral tools, construction in progress and capitalized exploration and development costs. Exclude those for expensed repairs, intangible assets, and land held for resale. (Same as item 200 plus item 201)	
80. Total employment – Enter the equivalent to average number of full-time employees for year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or released during the year should be included at the appropriate percentage. Include employees who are engaged in activities the value of which is capitalized. (Same as item 320)	
81. Employee compensation – Include all payments to and all other costs incurred on behalf of, or for the benefit of all employees. Include payments in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary. Include employee compensation costs which are capitalized. (Same as item 333) (See general instructions, page 4)	$

IF items 73, 74, 75, and 76 are each less than $3,000,000.00 then PART IV, FINANCIAL SCHEDULES need not be completed for foreign affiliate UNLESS foreign affiliate has an equity investment in another foreign affiliate of the U.S. Reporter and that foreign affiliate is required to complete PART IV, FINANCIAL SCHEDULES. That is, all affiliates upward in a chain of ownership from an affiliate for which a complete report must be filed, must file a complete report.

C-5

Part IV-FINANCIAL SCHEDULES – (Insurance companies, banks, or airline stations, see special instructions, page 6)

REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

BALANCE SHEET

■ ASSETS ■	Opening and closing balances: Closing (a)	Opening (b)
82. **Cash items** – Deposits in financial institutions and other cash items. Exclude overdrafts.	$	$
83. **Trade accounts and notes receivable** – Net of allowances for doubtful items		
84. **Other current receivables** – Net of allowances for doubtful items		
85. **Inventories** – Excluding land held for resale		
86. **Other current assets** – Include land held for resale and other current assets not included above.		
87. **Property, plant and equipment, net** – Land, timber, mineral rights, structures, machinery, and equipment, owned by affiliate, including those leased to others by affiliate, at historical cost, ~~net of~~ (a.) before deduction of accumulated depreciation, depletion, amortization and like charges. Include special tools, construction in progress, and capitalized exploration and development costs. Exclude intangible assets and land held for resale. b. accum. dep., depl., etc.		
88. **Equity investment in affiliates for which this affiliate is reporting as a parent** – Equity investment, including equity in undistributed earnings since acquisition, in all other reported foreign affiliates of U.S. Reporter(s), including branches of this affiliate		
89. **Other non-current assets** – Intangible assets, net of amortization, investments in and advances to U.S. Reporter(s), other stocks and bonds, and other non-current assets not included above.		
90. **TOTAL ASSETS** (Sum of items 82 through 89) ▶Unincorporated affiliate – Must equal sum of items 96 and 97 ▶Incorporated affiliate – Must equal sum of items 96 and 102 ▶	$	$
■ LIABILITIES ■		
91. **Trade accounts and notes payable**	$	$
92. **Current portion of long-term debt**		
93. **Other current liabilities** – Overdrafts and other current liabilities, not included above, having an original maturity of one year or less		
94. **Long-term debt (excluding current portion)** – Debt having an original maturity of more than one year, excluding current portion due		
95. **Other liabilities** – All liabilities which cannot be classified according to original maturity or due date. Include any underlying minority interest which arises out of the consolidation of more than one foreign affiliate. (However, the equity of a direct minority ownership interest in affiliate is not to be separated from the normal equity accounts.)		
96. **TOTAL LIABILITIES** (Sum of items 91 through 95) ▶	$	$
■ OWNERS' EQUITY ■		
▶ Unincorporated affiliate 97. **TOTAL OWNERS' EQUITY IN UNINCORPORATED AFFILIATE** – Home office account of a branch, net proprietorship account, partnership accounts, or equity accounts of other unincorporated affiliate (Equals item 90 minus item 96) ▶	$	$
▶ Incorporated affiliate 98. **Capital stock** – Common and preferred capital stock issued and outstanding	$	$
99. **Additional paid-in-capital** – All invested or contributed capital in addition to or in excess of capital stock		
100. **Retained earnings** – Earnings retained by corporation and legally available for declaration of dividends. Include those which have been voluntarily restricted.		
101. **Surplus reserves** – *Specify* ↙		
102. **TOTAL OWNERS' EQUITY FOR INCORPORATED AFFILIATE** (Sum of items 98 through 101, must equal item 90 minus item 96) ▶	$	$

PROPERTY, PLANT, AND EQUIPMENT

103. **Gross cost of property** – Land, timber, and mineral rights owned by affiliate, including those leased to others by affiliate, at historical cost. Exclude intangible assets, land held for resale, and capitalized exploration and development costs.	$	$
104. **Accumulated depletion, etc. of property** – Accumulated depletion and like charges against the gross cost of property included in item 103		
105. **Gross cost of plant and equipment** – Plant and equipment owned by affiliate, including those leased to others by affiliate, at historical cost. Include all structures, machinery and equipment, including special tools, construction in progress, and capitalized exploration and development costs. Exclude intangible assets		
106. **Accumulated depreciation, depletion, etc. of plant and equipment** – Accumulated depreciation, depletion, and like charges against the gross cost of plant and equipment included in item 105		
107. **Property, plant and equipment, net** (Sum of items 103 and 105 minus sum of items 104 and 106, must equal item 87)	$	$

INCOME STATEMENT

■ INCOME ■	For the year (a)
108. **Net sales or gross operating revenues** – Net sales (sales minus returns, allowances, and discounts) or gross operating revenues, both inclusive of sales or consumption taxes levied directly on the consumer, net value-added taxes, and excise taxes levied on manufacturers, wholesalers, and retailers	$
109. **Sales taxes** – The amount included in "Net sales or gross operating revenues," item 108, which represents sales or consumption taxes levied directly on the consumer, net value-added taxes, and excise taxes levied on manufacturers, wholesalers, and retailers	
110. **Net sales or gross operating revenues excluding sales taxes** (item 108 minus item 109)	
111. **Equity in net income of other affiliates** – Equity in net income, after foreign income taxes, of other reported foreign affiliates for which an equity investment is reported in item 88	
112. **Other income** – Realized and unrealized gains resulting from changes in exchange rates (include at the time they are recognized), gains on sales of property, plant, and equipment items, other extraordinary gains, non-operating income, and other income not included above *Specify* ↙	
113. **TOTAL INCOME** (Sum of items 110, 111, and 112) ▶	$
■ COSTS AND EXPENSES ■	
114. **Cost of goods sold** – Operating expenditures which relate to net sales or gross operating revenues excluding sales taxes (item 110). Include production royalty payments to foreign governments, their sub-divisions and agencies. Include depletion charges representing the amortization of the actual cost of capital assets, but excluding all other depletion charges.	$
115. **Selling, general and administrative expenses**	
116. **Foreign income taxes** – Provision for foreign income taxes for reporting period. Do not include U.S. income taxes. Exclude production royalty payments to foreign governments, their sub-divisions and agencies.	
117. **Other costs and expenses** – Realized and unrealized losses resulting from changes in exchange rates (include at the time they are recognized), losses on retirement or sale of property, plant and equipment items, other extraordinary losses, non-operating expenses, underlying minority interest in profits which arise out of consolidating more than one foreign affiliate on this report form, and other costs and expenses not shown above. (However, the equity of a direct minority interest in affiliate is not to be separated from the normal income accounts.) – *Specify* ↙	
118. **TOTAL COSTS AND EXPENSES** (Sum of items 114 through 117) ▶	$
■ NET INCOME ■	
119. **Net income** – After provision for foreign income taxes, but before dividends on common and preferred stock (item 113 minus item 118)	$

SUPPLEMENTARY DATA

120. **Dividends received** – Dividends in cash or in kind on both common and preferred stock, received by or credited to affiliate by any payor, net of tax withheld at the source, but excluding stock and liquidating dividends	$
121. **Interest received** – Total received by or credited to affiliate by any payor, net of tax withheld at the source	
122. **Interest paid** – Total paid, gross of tax withheld, by affiliate to all payees	
123. **Production royalty payments to foreign governments** – Payments to foreign governments, their sub-divisions and agencies of production royalties for natural resources	
124. **Taxes (other than income and payroll taxes) and non-tax payments to foreign governments (other than production royalty payments)** – Include tax liabilities other than income and payroll taxes, net of refunds or credits, paid or accrued to foreign governments, their sub-divisions and agencies by this affiliate for the year. Include value-added, sales, consumption and excise taxes, property and other taxes on the value of assets or capital, any remaining taxes (other than income or payroll taxes), and all payments of non-tax liabilities to foreign governments (except production royalty payments) such as import and export duties, license fees, fines and penalties, and similar items.	
125. **Research and development (R&D) expenditures, total** – Include all costs incurred including depreciation, wages and salaries, taxes, cost of materials and supplies, and allocated overhead (but excluding capital expenditures) by affiliate to support R&D performed in facilities owned or operated by affiliate. Include costs of R&D performed by affiliate for its own benefit, and costs of R&D performed by affiliate for others on contract. Exclude costs of R&D performed for this affiliate by others.	
126. **Payments of fees and royalties to U.S. persons other than the U.S. Reporter(s)** – Include royalties, license fees, and other payments for the use or sale of intangible property paid or accrued by affiliate	
127. **Receipts of fees and royalties from U.S. persons other than the U.S. Reporter(s)** – Include royalties, license fees, and other receipts for use or sale of intangible property paid or accrued to affiliate.	$

FORM BE-10B (8-7-74) DRAFT

C-4

Part IV-FINANCIAL SCHEDULES – Continued (If actual figures are not available give best estimates)

EMPLOYMENT AND EMPLOYEE COMPENSATION In addition to employment and employee compensation relating to current operations, these items are to be reported inclusive of employment and employee compensation related to capitalized activities. See general instructions, page [illegible] for requirements and definitions.	Enter actual number of employees U.S. citizens (a)	Foreign personnel (b)
● EMPLOYMENT ●		
128. TOTAL EMPLOYMENT – The equivalent to the average number of full-time employees for the year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or released during the year should also be included at the appropriate percentage. (Sum of items 129 and 130)		
129. Production workers – Employees reported in item 128 who are engaged in production or related activities at or below the working supervisory level.		
130. Non-production workers – Employees reported in 128 who are not engaged in production or related activities (Sum of items 131 through 134)		
131. Managerial employees – Non-production workers engaged in management activities, including managers engaged in R&D work		
132. Research and development scientists and engineers, including managers engaged in R&D work		
133. Other professional and technical employees – Non-production workers engaged in professional and technical work other than research and development or managerial activities		
134. Other non-production workers (item 130 minus sum of items 131, 132, and 133)		

● EMPLOYEE COMPENSATION ●	Compensation Report all amounts in thousands of U.S. dollars Total (a)	Production workers (b)	Non-production workers (c)
135. Employer compensation – Include all payments to and all other costs incurred on behalf of, for the benefit of, all employees. Include compensation in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary. (Sum of items 136, 137, and 138)	$	$	$
136. Wages and salaries – Include employees' gross earnings (before any payroll deductions) vacation, dismissal, and sick pay; paid bonuses; commissions, except commissions to independent sales personnel and the cash equivalent of wages and salaries paid in stock			
137. Cost of employee benefit plans – Include costs of plans (whether legally required or voluntary) such as employer contributions to pension funds, group health and life insurance, private pension, unemployment, employment compensation, deferred profit sharing, etc.			
138. Other labor costs – Include costs for such items as vacation and recreational facilities, employee training programs, in-house medical facilities, free parking, discounts on employees' purchases, operating losses on company-owned cafeteria, etc.			
	$	$	$

DISTRIBUTION OF SALES OR OPERATING REVENUES If a detailed breakdown of exports to other countries is not available, enter the estimated percentage breakdown in columns (c) and (e).	Total (a)	Sales to the U.S. Reporter(s) or its (their) foreign affiliate(s) Amount (b)	Sales to the U.S. Reporter(s) or its (their) foreign affiliate(s) Percent (c)	Sales to outside customers Amount (d)	Sales to outside customers Percent (e)
139. Net sales or gross operating revenues excluding sales taxes. The amount in the total column should equal item 110 (Sum of items 140, 141, and 142)	$	$		$	
140. Sales in affiliate's country of location					
141. Exports to the United States					
142. Exports to other countries (Sum of items 143 through 152)			100 %		100%
143. Canada			%		%
144. Latin American Republics and other Western Hemisphere			%		%
145. United Kingdom			%		%
146. Belgium, France, Italy, Luxembourg, Netherlands, West Germany			%		%
147. Ireland and Denmark			%		%
148. Other Western Europe			%		%
149. Eastern Europe			%		%
150. Japan			%		%
151. Australia, New Zealand, and South Africa			%		%
152. Other Asia and Africa	$	$	%	$	%

SUPPLEMENTAL INSTRUCTIONS FOR INSURANCE COMPANIES, BANKS, AND AIRLINE STATIONS – These special instructions are intended to supplement or supplant the instructions given elsewhere on the form. If problems should arise in applying these instructions or in reporting other specific line items, contact this Bureau at (202) 523-0632.

● INSURANCE COMPANIES ●

When there is a difference, the Financial Schedules are to be prepared on the same basis as an annual report to the stockholders, rather than on the basis of an annual statement to an insurance department. Valuation should be according to normal commercial accounting procedures, not at the rates promulgated by the National Association of Insurance Commissioners or equivalent foreign agency. Include assets not acceptable for the annual statement to an insurance department.

Items

85 Trade accounts and notes receivable – Include current items such as agents balances or uncollected premiums, amounts recoverable from reinsurers, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

91 Trade accounts and notes payable – Include current items such as loss liabilities, policy claims, commissions due, and other current liabilities, arising from the ordinary course of business. (Policyholders are to be included in "Other liabilities," item 95, unless they are clearly current liabilities.)

108 Net sales or gross operating revenues – Include items such as earned premiums, annuity considerations, gross investment income, and items of a similar nature. Exclude income from other foreign affiliates of the U.S. Reporter(s), which is to be reported in item 111.

114 Cost of goods sold – Include costs relating to net sales or gross operating revenues, item 110, such as policy losses incurred, death benefits, matured endowments, other policy benefits, increases in liabilities for future policy benefits, other underwriting expenses, and investment expenses.

● BANKS ●

Items

85 Trade accounts and notes receivable – Include current items such as current portion of loans, customer's liability to the bank on outstanding acceptances, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

91 Trade accounts and notes payable – Include current items such as deposits, acceptances, and other current liabilities arising from the ordinary course of business.

● FOREIGN AIRLINE STATIONS (BRANCH OR INCORPORATED) ●

a. In the Identification Section, item 19, mark "Other," and specify "foreign airline station."

b. The Balance Sheet should reflect assets located in the station, such as buildings or leaseholds, inventories of fuel or spare parts, office equipment, maintenance and repair equipment, and items of a similar nature. Transit aircraft should be excluded.

c. Item 110 of the Income Statement should show all costs and expenses of the station including depreciation. Item 110 should be broken down into the categories in items 114 through 117. Item 108 should be the amount in item 110 plus the profit imputed to the performance of service for or sales to outside customers (excluding ticket sales or freight revenues generated).

d. Employment and employee compensation should relate only to station personnel. Exclude all air crews and flight personnel.

C-7

Part IV-FINANCIAL SCHEDULES - CONTINUED - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

MERCHANDISE TRADE

• U.S. MERCHANDISE EXPORTS TO FOREIGN AFFILIATE • (See general instructions, page for details of data requirements)		Total (a)	Shipped by the U.S. Reporter(s): Products of the U.S. Reporter(s) (b)	Shipped by the U.S. Reporter(s): Products of others (c)	Shipped by other U.S. persons: Products of others (d)
153. Goods shipped to affiliate from the United States, f.a.s. U.S. port (Equals sum of items 154 through 163 and equals sum of items 164 through 168)		$	$	$	$
BY PRODUCT (See "Export and Import Trade Classifications" part of the Industry Classifications and Export and Import Trade Classifications booklet)	SITC codes				
154. Food, beverages, and tobacco	0 - 1				
155. Inedible crude materials, except fuels	2				
156. Petroleum and products, excluding natural gas	33				
157. Chemicals	5				
158. Machinery, electrical and non-electrical	71 - 72				
159. Road motor vehicles and parts	732				
160. Other transportation equipment	73 excluding 732				
161. Metal manufactures	67, 68 and 69				
162. Other manufactures	61 through 66 and 8				
163. All other	3 (excluding 331), 4, and 9				
BY INTENDED USE					
164. For further processing or assembly					
165. For resale without further manufacture					
166. Capital equipment for lease or rental by affiliate to others					
167. Capital equipment for use by affiliate					
168. Other- Specify→		$	$	$	$

• U.S. MERCHANDISE IMPORTS FROM FOREIGN AFFILIATE • (See general instructions, page for details of data requirements)		Total (a)	Shipped to the U.S. Reporter(s): Products of affiliate (b)	Shipped to the U.S. Reporter(s): Products of others (c)	Shipped to other U.S. persons: Products of affiliate (d)	Shipped to other U.S. persons: Products of others (e)
169. Goods shipped by affiliate to the United States, f.o.b. foreign port (Sum of items 170 through 179)		$	$	$	$	$
BY PRODUCT (See "Export and Import Trade Classifications" part of the Industry Classifications and Export and Import Trade Classifications booklet)	SITC codes					
170. Food, beverages, and tobacco	0 - 1					
171. Inedible crude materials, except fuels	2					
172. Petroleum and products, excluding natural gas	33					
173. Chemicals	5					
174. Machinery, electrical and non-electrical	71 - 72					
175. Road motor vehicles and parts	732					
176. Other transportation equipment	73 excluding 732					
177. Metal manufactures	67, 68 and 69					
178. Other manufactures	61 through 66 and 8					
179. All other	3 (excluding 331), 4, and 9	$	$	$	$	$

• NON-UNITED STATES MERCHANDISE TRADE OF FOREIGN AFFILIATE •	Total (a)	Trade with foreign affiliates of the U.S. Reporter(s) (b)	Trade with other foreigners (c)
180. Merchandise exports shipped by affiliate to non-United States persons	$	$	$
181. Merchandise imports shipped by affiliate to non-United States persons			

COMMERCE USE ONLY

C-8

Part IV-FINANCIAL SCHEDULES ↓ CONTINUED - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

SURPLUS RECONCILIATION

	Amount
● RECONCILIATION OF RETAINED EARNINGS OF ● UNINCORPORATED AFFILIATE, OR OWNERS' EQUITY FOR UNINCORPORATED AFFILIATE (Items 182 plus 183 minus item 194 plus item 195 must equal item 196)	(a)
182. Opening balances - Unincorporated affiliate enter amount from item 99, column b Unincorporated affiliate enter amount from item 100, column b	$
183. Net income, after provision for foreign income taxes (Amount from item 193)	
184. Dividends or net income remitted to owners - Incorporated affiliate enter amount of dividends declared on common and preferred stock, excluding stock dividends - Unincorporated affiliate enter amount of net income remitted to owners	
185. Other changes, increase or (decrease), including stock and liquidating dividends for incorporated affiliate - Specify	
186. Closing balance (must equal item 182 plus 183 minus 184 plus 185) - Unincorporated affiliate enter amount from item 99, column b, Incorporated affiliate enter amount from item 100, column b	$
● CHANGES IN ADDITIONAL PAID-IN-CAPITAL ● AND SURPLUS RESERVES - CORPORATIONS ONLY	
187. Change in "Additional paid-in-capital" - Specify items causing difference between closing and opening balances, item 99, column a minus column b	$
188. Change in "Surplus Reserves" - Specify items causing difference between closing and opening balances, item 101, column a minus column b	$

PETROLEUM AND MINING EXPLORATION AND DEVELOPMENT EXPENDITURES

	Expenditures for the year (a)
189. Total exploration and development expenditures (Sum of items 190 and 191)	$
190. Charged against income (Included in item 124 or 127)	
191. Capitalized (Included in item 204)	$

COMMERCE USE ONLY

STATEMENT OF CHANGES IN FINANCIAL POSITION

● SOURCES OF FUNDS ●	For the year (a)
192. Net income after provision for foreign income taxes (Enter amount from item 193)	$
193. Depletion, etc. - Charge to the income statement relating to gross cost of property as defined for item 103	
194. Depreciation, etc. - Charge to the income statement relating to gross cost of plant and equipment as defined for item 105	
195. Amortization - Charge to the income statement for amortization and like charges against intangible assets, and similar items, included in item 89	
196. Retirement and sales of property, plant, and equipment - Net book value of assets at time of retirement or sale exclusive of any gains or losses (such gains or losses should be shown in the income statement) a. Sales b. Retirements	
197. Change in owners' equity in unincorporated affiliate - Exclude the effect of net income shown in item 119 and net income remitted to owners shown in item 184	
198. Sales or purchases of capital stock (incorporated affiliate only) - Sales of additional capital stock, net of repurchases by affiliate of its outstanding capital stock, including any contributions to capital not resulting in issuance of capital stock, but excluding stock dividends	
199. Change in total liabilities (Item 96, closing balance minus opening balance)	
200. Other sources - Specify z	
201. TOTAL SOURCES (Sum of items 192 through 200 must equal item 209)	$
● APPLICATIONS OF FUNDS ●	
202. Change in current assets - Total difference between opening and closing balances of the balance sheet current asset accounts (items 82 through 86, column a minus column b)	$
203. Expenditures for property - Expenditures for the acquisition of land, timber, and mineral rights, used by affiliate or leased to others, exclude those for intangible assets, land held for resale, and capitalized exploration and development costs, covers those property items charged to the balance sheet net property, plant and equipment account, item 87, and shown separately as item 105.	
204. Expenditures for plant and equipment - Expenditures for acquisition and improvement of structures, machinery, and equipments, used by affiliate or leased to others, including those for special tools, construction in progress, and capitalized exploration and development costs. Exclude those for expensed repairs and intangible assets. Covers plant and equipment items charged to the balance sheet net property, plant and equipment account, item 87, and shown separately as item 105.	
205. Other additions to (subtractions from) property, plant and equipment account, item 87 - Specify g	
206. Dividends or net income remitted to owners - Incorporated affiliate enter amount of dividends declared on common and preferred stock excluding stock and liquidating dividends, Unincorporated affiliate, enter amount of net income remitted to owners (Same as item 184)	
207. Change in equity investment in affiliates for which affiliate is reporting as a parent - Total difference between the opening and closing balances of balance sheet item 89, column a minus column b	
208. Change in other non-current assets - Total difference between the opening and closing balances of balance sheet other non-current assets account (item 89, column a minus column b)	
209. TOTAL APPLICATIONS (Sum of items 202 through 208, must equal item 201) If the opening balance for item 87 plus sum of items 203, 204, and 205 minus sum of items 193, 194, and 196 does not equal the closing balance of item 87, explain.	$

COMPOSITION OF EXTERNAL FINANCING

● CLOSING BALANCES ●		Total (Sum of columns b through e) (a)	Financial position with - The U.S. Reporter(s) (b)	Other U.S. residents (c)	Foreign affiliates of the U.S. Reporter(s) (d)	Other foreign persons (e)
210. Current liabilities-(Sum of total column for items 210a and b must equal sum of closing balances of items 91, 92, and 93)	a. To banks	$	$	$	$	$
	b. To other than banks					
211. Long-term debt (excluding current portion) - (Sum of total column for items 211a and b must equal the closing balance of item 94)	a. To banks					
	b. To other than banks					
212. Current receivables-(Total must equal sum of closing balances of items 83 and 84)						
213. Non-current receivables and financial investments-(Total must equal closing balance for part of item 89 which is non-current receivables and financial investments)						
214. Capital stock or owners' equity - Incorporated affiliate, total column must equal sum of closing balance of items 98 and 99; unincorporated affiliate, total column must equal closing balance of item 97						
215. TOTAL (Sum of items 210 through 214)		$				
● OPENING BALANCES ●						
216. Current liabilities-(Sum of total column for items 216a and b must equal sum of opening balances of items 91, 92, and 93)	a. To banks	$	$	$	$	$
	b. To other than banks					
217. Long-term debt (excluding current portion) - (Sum of total column for items 217a and b must equal opening balance of item 94)	a. To banks					
	b. To other than banks					
218. Current receivables-(Total must equal sum of opening balances of items 83 and 84)						
219. Non-current receivables and financial investments - (Total must equal opening balance for part of item 89 which is non-current receivables and financial investments)						
220. Capital stock or owners' equity - Incorporated affiliate, total column must equal sum of opening balance of items 98 and 99; unincorporated affiliate, total column must equal opening balance of item 97						
221. TOTAL (Sum of items 216 through 220)		$				

AFFILIATE FIRM FORM

X'd (crossed out) items are those Bureau of Economic Analysis deleted

Blue X items: BEA was willing to drop DRAFT 7/7/74

FORM BE-10B (Draft)
3-7-74

U.S. DEPARTMENT OF COMMERCE
SOCIAL AND ECONOMIC STATISTICS ADMINISTRATION
BUREAU OF ECONOMIC ANALYSIS

CONFIDENTIAL

SURVEY OF U.S. BUSINESS INVESTMENTS ABROAD - 1973

(Report for foreign affiliate)

RETURN TO

Bureau of Economic Analysis
ATTN: International Investment Division -BE-50(SSB)
1401 K STREET, NW. (Tower Building)
U.S. Department of Commerce
Washington, D.C. 20230

NOTICE - The information reported on this form will be used exclusively for statistical purposes. It will be held in strictest confidence by this Bureau, and published only in such aggregates which preclude the disclosure of data supplied by individual Reporters.

Control number

Ent D-1

Part I - IDENTIFICATION OF FOREIGN AFFILIATE BEING REPORTED

1. Name of U.S. Reporter of affiliate (Same as on Form BE-10A)

2. Serial number of form for foreign affiliate (Same as on Form BE-10A)

3. Name of foreign affiliate being reported (Give name as shown in papers of incorporation or equivalent documents)

4. If there has been a name change since 1966, give 1966 name of affiliate

5. Level of consolidation (Mark one)

- This form is for a single foreign affiliate
- Number of foreign affiliates consolidated (hereinafter considered one affiliate)

NOTE - Do not consolidate affiliates in different countries or different industries. See item for a list of industries. See page of general instructions for limited conditions under which consolidation of affiliates in the same country and the same industry is permitted.

6. Names of all foreign affiliates consolidated (If indicated in Item 5)

7. Form of organization of affiliate (Mark one)

- Branch
- Corporation
- Partnership
- Other - Specify
- Sole proprietorship

8. Country of incorporation or organization of affiliate

COMMERCE USE ONLY

PPC
IPC
OWN
DAC
AFIL
INO

9. Country of location (Country in which affiliate's physical assets reside or where primary activity is carried out.

10. Line of ownership being reported (Mark one)

- Affiliate directly owned by U.S. Reporter (or had direct financial transaction with U.S. Reporter)
- Affiliate directly owned by another foreign affiliate - Name and serial number

11. Ownership - Percent of voting stock for an incorporated foreign affiliate, or an equivalent interest for an unincorporated foreign affiliate, owned directly by -

	Reporting period	
	Ending (a)	Beginning (b)
a. U.S. Reporter (Named in Item 1)	%	%
b. Foreign affiliate (Named in Item 10)	%	%
c. Other foreign affiliates of U.S. Reporter	%	%
d. Other U.S. persons	%	%
e. Other foreign persons	%	%
f. TOTAL	100.0 %	100.0 %

12. If Item 11c is filled give names and serial numbers of other foreign affiliate owners as shown on Form BE-10A.

13. If Item 11d is filled give names, addresses, and percent of ownership for other U.S. persons owning ten-percent or more of the voting rights.

14. Financial schedules filed for affiliate (Mark one)

- Report contains PART III, SELECTED FINANCIAL DATA and PART IV, FINANCIAL SCHEDULES
- Report does not include PART III, SELECTED FINANCIAL DATA and PART IV, FINANCIAL SCHEDULES. They are being filed on Form BE-10B, under - Serial number OR company name and address

Report does not include PART IV, FINANCIAL SCHEDULES pertaining to affiliate because foreign affiliate's: (a) total assets, (b) net sales or gross operating revenues excluding sales taxes, (c) total merchandise exports received from the United States, and (d) total merchandise exports to the United States, are each less than $3,000,000.00; therefore, the U.S. Reporter is EXEMPT from filing PART IV.

	Year (4 last 2 digits)	Month	Day
15. Affiliate data are for year ending →			
16. Affiliate data taken *Opening balance* or *Beginning of reporting period* always refer to data as of →			
17. Affiliate data taken *Closing balance* or *End of reporting period* always refer to data as of →			

18. Dates shown in Items 15 through 17 refer to books of foreign affiliate: Items 34 through 43, columns through , refer to data according to books of parent. (Mark one)

- Dates for parents books are exactly the same as dates shown in Items 15 through 17
- Dates for parent's books differ from the dates shown in Items 15 through 17 - Explain

---

IMPORTANT - Please read Carefully all INSTRUCTIONS

1. FILING - A completed Form BE-10B is required for each foreign business enterprise which was a foreign affiliate of the U.S. Reporter for any part of the year ended December 31, 1973. Multiple reports are required for a single foreign affiliate to report separately the following:

a. Each direct line of ownership in a foreign affiliate which is held by the U.S. Reporter or a foreign affiliate of the U.S. Reporter

b. Direct financial positions or transactions with the U.S. Reporter when the foreign affiliate is indirectly owned by the U.S. Reporter

c. Each U.S. Reporter's ownership in a foreign affiliate where two or more such U.S. Reporters jointly own the affiliate (See page of general instructions.)

Reports containing Form BE-10B are due 60 days after publication of the reporting requirements in the Federal Register, If any inquiries, call (202) 965-0532.

2. EXEMPTIONS

Total filing exemption, Form BE-10B - If the foreign affiliate's total assets and net sales or gross operating revenues excluding sales taxes (Items 73 and 74) were each less than $250,000.00 no Form BE-10B need be filed for the foreign affiliate. Value is to be determined based on the books of the foreign affiliate translated into U.S. dollars. However, if a foreign affiliate owns another foreign affiliate for which a Form BE-10B must be filed, then a Form BE-10B must also be filed for the foreign parent regardless of the value of the foreign parent's assets or income. That is, all affiliates upward in a chain of ownership must be reported.

Partial reporting exemption, Form BE-10B - If, for a given affiliate, the following four items are each less than $3,000,000, then the Reporter is exempt from completing PART IV, FINANCIAL SCHEDULES for the affiliate.

a. Total assets (Item 73)
b. Net sales or gross operating revenues excluding sales taxes (Item 74)
c. U.S. merchandise exports shipped to the affiliate (Item 75)
d. U.S. merchandise imports from the affiliate (Item 76)

Report these four items for each affiliate in PART III, SELECTED FINANCIAL DATA. Value is to be determined based on the books of the foreign affiliate translated into U.S. dollars. However, if a foreign affiliate owns another foreign affiliate for which a complete Form BE-10B must be filed, then a complete Form BE-10B must also be filed for the foreign parent regardless of the value of the foreign parent's assets, income or U.S. trade. That is, all affiliates upward in a chain of ownership from an affiliate for which a complete report must be filed, must file a complete report.

3. GENERAL NOTES - SPECIAL

a. Currency amounts should be reported in U.S. dollars and be rounded to the nearest thousand.
b. If an item is between $500.00, enter *0.*
c. Use parentheses to indicate negative numbers.
d. Every question on the form should be answered except where reporting is specifically exempt. If certain information cannot be supplied because the accounts of the foreign affiliate cannot be obtained, give your best estimate.
e. In PART I, IDENTIFICATION OF FOREIGN AFFILIATE the instruction *Mark one* is often given. When you find it necessary to mark more than one answer, provide an explanation.
f. All questions should be answered in the context of the reporting period for the particular affiliate being reported (see Items 15, 16, and 17) unless another time period is specified in the instructions.

D-2

Part I - IDENTIFICATION OF FOREIGN AFFILIATE BEING REPORTED - Continued

19. Major activity of affiliate (Mark one)

- ☐ Extracting of oil or minerals (including exploration and development)
- ☐ Manufacturing (fabricating, assembling, processing)
- ☐ Selling for distributing) goods
- ☐ Providing a service
- ☐ Other - Specify ▼

20. What is the major product or service involved in this activity?

21. Percent of foreign affiliate's sales (reported in item 14, PART III) accounted for by each classification. Account for all classifications which comprise five percent or more of net sales; account for no less than seventy-five percent of net sales. (Holding companies should use total income.) See the "Industry Classifications" in the INDUSTRY CLASSIFICATION AND EXPORT AND IMPORT TRADE CLASSIFICATIONS booklet for a full description of each industry.

Code (a)	Percent of sales (b)	Industry (c)
		AGRICULTURE, FORESTRY, AND FISHING
010		Agricultural production - crops
020		Agricultural production - livestock
070		Agricultural services
080		Forestry
090		Fishing, hunting, and trapping
		MINING
101		Iron
102		Copper, lead, zinc, gold and silver
103		Bauxite and other aluminum ores
109		Other metallic ores and metal mining service
129		Coal and other nonmetallic minerals, except oil and gas
131		Crude petroleum extraction (no refining) and natural gas
138		Oil and gas field services
		CONSTRUCTION
150		Construction
		MANUFACTURING
201		Meat products
202		Dairy products
203		Canned and preserved fruits and vegetables
204		Grain mill products
208		Beverages
209		Other food and kindred products
210		Tobacco manufactures
220		Textile mill products
230		Apparel and other finished products made from fabrics and similar materials
240		Lumber and wood products, except furniture
250		Furniture and fixtures
262		Pulp, paper and board mills
264		Miscellaneous converted paper products
265		Paperboard containers and boxes
270		Printing, publishing, and allied industries
281		Industrial chemicals, plastics materials, and synthetics
283		Drugs
284		Soap, cleaners and toilet goods
285		Paints and allied products
287		Agricultural chemicals
289		Chemical products, n.e.c.
291		Integrated petroleum refining and extraction
292		Petroleum refining without extraction
299		Petroleum and coal products, n.e.c.
301		Rubber products
307		Miscellaneous plastics products
310		Leather and leather products
329		Glass products
329		Stone, clay, cement, and concrete products
331		Primary metal products, ferrous
335		Primary metal products, non-ferrous
341		Metal cans and shipping containers
342		Cutlery, hand tools and hardware
343		Metal plumbing fixtures and heating equipment, except electric and warm air
344		Fabricated structural metal products
345		Screw machine products, bolts, nuts, screws, rivets, and washers
346		Metal stampings and forgings
349		Fabricated metal products n.e.c., including ordnance, and coating, engraving, and allied services
351		Engines and turbines
352		Farm and garden machinery and equipment
353		Construction, mining, and materials handling machinery and equipment
354		Metalworking machinery and equipment
355		Special industry machinery
356		General industrial machinery and equipment
357		Office, computing, and accounting machines
358		Refrigeration and service industry machinery
359		Machinery, except electrical, n.e.c.
363		Household electrical appliances
364		Electrical lighting and wiring equipment
366		Radio, television, and communication equipment
367		Electronic components and accessories
369		Electrical machinery, n.e.c.
371		Motor vehicles and equipment
379		Other transportation equipment, n.e.c.
381		Scientific instruments and measuring and controlling devices
383		Optical and ophthalmic goods
384		Surgical, medical, and dental instruments and supplies
386		Photographic equipment and supplies
387		Watches, clocks, and watchcases
390		Miscellaneous manufactured products, n.e.c.
		TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES
449		Petroleum tanker operations
449		Other water transportation
450		Transportation by air
464		Pipeline transportation, including natural gas transmission
479		Transportation, n.e.c.
480		Communication
490		Electric, gas, and sanitary services
		WHOLESALE TRADE
501		Motor vehicles and automotive parts and supplies
503		Lumber and other construction materials
506		Metals and minerals, except petroleum
505		Electrical goods
506		Hardware, plumbing and heating equipment and supplies
507		Machinery, equipment and supplies, except farm and garden
508		Farm and garden machinery and equipment
509		Miscellaneous durable goods, n.e.c.
511		Paper and paper products
512		Drugs and chemicals and allied products
513		Apparel, piece goods, and notions
514		Groceries and related products
515		Farm-product raw materials
517		Petroleum and petroleum products
519		Miscellaneous non-durable goods, n.e.c.
		RETAIL TRADE
520		Retail trade, except food stores
524		Food stores
		FINANCE, INSURANCE, AND REAL ESTATE
600		Banking
610		Credit agencies other than banks
620		Security and commodity brokers, dealers, exchanges and services and investment offices
650		Insurance carriers, agents, brokers, and services
650		Real estate
660		Combinations of real estate, insurance, loans, and law office
670		Holding companies
		SERVICES
700		Hotels, rooming houses, camps, and other lodging places
731		Advertising
780		Motion pictures, including television tape and film
891		Engineering, architectural, and surveying services
893		Accounting, auditing, and bookkeeping services
899		Other personal and business services, n.e.c.

D-3

Part I - IDENTIFICATION OF FOREIGN AFFILIATE BEING REPORTED - Continued

22. Currency translation (Mark one)

- ☐ No single rate of exchange was used for all items
- ☐ The books of foreign affiliate are normally kept in U.S. dollars
- ☐ A single rate of exchange was used to translate all items into (thousands of) U.S. dollars — Foreign currency unit name; Number units per U.S. dollar
- COMMERCE USE ONLY

23. Inventory valuation method (Mark one)

- ☐ LIFO
- ☐ Average cost
- ☐ FIFO
- ☐ Other - Specify

24. Year foreign affiliate was established — Year

25. Establishment of Reporter Interest (Enter year in appropriate box)

- [Last 2 digits] Year Reporter established affiliate
- [Last 2 digits] Year Reporter acquired ten-percent interest or more

26. Name and address of person from whom affiliate was acquired (If after December 31, 1966)

27. Ownership status of affiliate (Mark one)

- ☐ A foreign affiliate of U.S. Reporter during entire reporting period
- ☐ Established by, or a ten-percent or more voting interest was acquired by U.S. Reporter during reporting period — Year (last) Month (2 digits)
- ☐ Seized or expropriated →
- ☐ Sold - Name and address (Data sold) →
- ☐ Dissolved or liquidated →

28. If seller in Item 26 or buyer in Item 27 was a foreign person owned by a U.S. person, give name of U.S. person

29. Operating period (Mark one) — Year (last) Month (2 digits)

- ☐ Operating (i.e., producing goods or services) full 12 months of reporting period
- ☐ Operations began →
- ☐ Operations ended →
- ☐ Operated on a seasonal basis
- ☐ Other - Specify

30. Number of establishments affiliate operates

(An establishment is an economic unit at a single physical location where business is conducted or where services or industrial operations are performed; where domestic and secondary activities are performed at a single location, each should be considered as a separate establishment if employment in each activity is significant and establishment type data, such as number of employees, hours worked and wages and salaries, and receipts, are available.)

31. Licensing agreements with U.S. Reporter (Enter number)

- Know-how
- Patents
- Trademarks
- Other - Specify

32. Ownership of other affiliates (Mark appropriate box or enter number)

- ☐ No direct voting ownership in other foreign affiliates of U.S. Reporter
- Number of directly owned affiliates

33. Name(s) of directly owned affiliate (as shown on Form BE-10B) — Serial number(s)

Part II - INVESTMENT AND TRANSACTIONS BETWEEN PARENT AND FOREIGN AFFILIATE - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

Banks, insurance companies, securities dealers, brokers, etc. - In order to avoid duplication in U.S. Government statistics, do not include in intercompany transactions or accounts with this foreign affiliate the data on claims and liabilities, and purchases or sales of foreign securities which are reportable on Treasury Foreign Exchange Forms BJ, B-2, B-3, S-1 and/or S-4. Permanent investments and retained earnings, income, fees, and other items remitted or credited between the U.S. Reporter and the foreign affiliate should be reported here on appropriate lines. (Exclude interest and fees relating to the items reportable on the Treasury Foreign Exchange forms.)

Important Example - Read

Dollar figures should be reported as illustrated.

EXAMPLE: If figure is $1,125,628,000.00 →

Bil-lions (000)	Mil-lions (000)	Thou-sands (000)
1	125,	628

INVESTMENT BETWEEN PARENT AND AFFILIATE	According to books of affiliate: Closing balance (a)	Opening balance (b)	According to books of parent: Closing balance (c)	Unrealized gain (loss) due to exchange rate fluctuation during year (d)	Opening balance (e)
▶ Unincorporated affiliate					
34. Parent's equity - Home office account of a branch, net proprietorship account, or parent's share of partnership accounts, or equity accounts of other unincorporated affiliates	$	$	$	$	$
▶ Incorporated affiliate					
« CURRENT ITEMS »					
35. Current liabilities owed to parent (exclude current portion of long-term debt)					
36. Current portion of long-term debt owed to parent					
37. Current claims due from parent					
« LONG-TERM ITEMS »					
38. Long-term debt owed to parent, excluding current portion					
39. Long-term claims due from parent					
« OWNER'S EQUITY ITEMS »					
40. Capital stock of affiliate owned by parent - When reporting this item according to books of the parent, give the figure which represents the cost to parent of capital stock, including any premium paid, and any capital contributions by parent not resulting in issuance of capital stock. Exclude any equity in undistributed earnings of affiliate since acquisition.)					
41. Parent's equity in additional paid-in-capital					
42. Parent's equity in retained earnings					
43. Parent's equity in surplus reserves - Specify					
44. Capital stock of parent owned by affiliate, including any premium paid					
45. TOTAL (Sum of items 35, 36, 38, 40, 41, 42 and 43 minus sum of items 37, 39, and 44)	$	$	$	$	$

SETTLEMENT OF DEBT	Total (a)	Due to exchange rate fluctuations (b)	Due to other reasons (c)
46. Gain (loss) realized by parent on settlement of debt - Difference between the debt balances according to books of parent minus the amount received or paid by parent in settlement of debt items during the period, which settlement would be reflected in a change in one or more of items 35 through 39	$	$	$

COMMERCE USE ONLY

D-4

Part II - INVESTMENT AND TRANSACTIONS BETWEEN PARENT AND FOREIGN AFFILIATE - Continued - - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

NET INCREASE (DECREASE) IN PARENT'S EQUITY HOLDINGS IN AFFILIATE This section is to identify which change items result in capital outflows from (capital inflows to) the United States as defined for balance of payments purposes.	According to books of parent Net increase (decrease) (a)	Means of settlement code (b)	→ # EXPLANATION # MEANS OF SETTLEMENT CODE
NOTE - Enter items 48-54 at actual transaction value; the gain or loss necessary to reconcile to change in book value should be entered in item 52.			
47. Unincorporated affiliate enter amount for item 34, column c minus column e. Incorporated affiliate enter amount for item 40, column c minus column e (Equals sum of items 48 through 59)	$	$	1. Cash raised abroad by a U.S. (Delaware) corporation through issuance of long-term debt securities
48. Establishment (total liquidation) of affiliate			
49. Acquisition, partial or total, of an equity interest - From affiliate			
50. From all other foreigners (Specify country of foreign seller if located in a different country from this affiliate)			2. Other cash, exclusive of code a.
51. From U.S. persons			
52. (Sale), partial or total, of an equity interest - To this affiliate			3. Exchange of stock or other equity for stock
53. To all other foreigners (Specify country of foreign purchaser if located in a different country from this affiliate)			
54. To U.S. persons			4. Exchange of stock or other equity for financial assets other than cash or stock
55. Gain (loss) on sale or liquidation (partial or total) of an equity interest			
56. Capital contributions not resulting in issuance of capital stock			5. Transfer of equipment, inventory or other tangible property
57. Writeup (writedown)			
58. Exchange rate fluctuation during the year			
59. Other - Specify	$	$	6. Transfer of intangible assets: for example, patents, know-how, rights
NET INCREASE (DECREASE) IN AFFILIATE'S EQUITY HOLDINGS IN PARENT			
60. Amount - Item 44, column c minus column e (Equals sum of items 61, 62, and 63)	$	$	
61. Net increase (decrease) resulting from transactions with all foreigners			7. Capitalization of intercompany accounts
62. Net increase (decrease) resulting from transactions with all U.S. persons			
63. Other - Specify			8. Other - Specify
COMMERCE USE ONLY 64. Net capital outflow (equity only)	$		

RECEIPTS AND PAYMENTS OF DIVIDENDS, INTEREST, FEES, ROYALTIES, AND RENTALS Based on books of parent, enter amount the parent of affiliate received from, paid to, or entered into the company account with affiliate. Include amounts for which payment was made in kind.	Receipts by parent from affiliate		Payments by parent to affiliate	
	Net of tax withheld (a)	Tax withheld (b)	Net of tax withheld (c)	Tax withheld (d)
65. Dividends on common and preferred stock, paid out of earnings, excluding stock dividends	$	$	$	$
66. Interest				
67. Royalties, license fees, and other fees for the use or sale of intangible property				
68. Rentals for the use of tangible property				
69. Fees for services rendered - including management services, professional or technical services, allocated expenses, etc.				
70. Film or television tape rentals				
71. TOTAL (Sum of items 65 through 70)	$	$	$	$

PARENT'S EQUITY IN AFFILIATE'S NET INCOME	For the year (a)
72. Parent's equity in affiliate's net income after provision for foreign income taxes - Enter parent's portion of net income before depletion charges, except that representing amortization of actual cost of capital assets and before provision for common and preferred dividends. (Include unrealized gains or losses due to exchange rate fluctuations at the time they are recognized.)	$

Part III - SELECTED FINANCIAL DATA OF FOREIGN AFFILIATE - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

# FINANCIAL DATA #	Amount (a)
73. Total assets at end of reporting period (Same as item 90, column a)	$
74. Net sales or gross operating revenues excluding sales taxes - Net sales (sales minus returns, allowances, discounts) or gross operating revenues, both exclusive of sales or consumption taxes levied directly on the consumer, net value added taxes, and excise taxes levied on manufacturers, wholesalers, and retailers. (Same as item 110)	
75. U.S. merchandise exports shipped to affiliate, f.a.s. U.S. port (Same as item 155, column a)	
76. U.S. merchandise imports from affiliate, f.o.b. foreign port (Same as item 169, column a)	
77. Owners' equity (or net worth) at end of reporting period (Same as item 97 or item 102, column a)	
78. Net income after provision for foreign income taxes, but before dividends on common and preferred stock (Same as item 119)	
79. Expenditure for property, plant, and equipment - Expenditures for the acquisition and improvement of land, timber, mineral rights, structures, machinery, and equipment, for affiliate's own use or for lease to others, including those for special tools, construction in progress and capitalized exploration and development costs. Exclude those for expensed repairs, intangible assets, and land held for resale. (Same as item 200 plus item 201)	
80. Total employment - Enter the equivalent to average number of full-time employees for year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or released during the year should be included at the appropriate percentage. Include employees who are engaged in activities the value of which is capitalized. (Same as item 126)	
81. Employee compensation - Include all payments to and all other costs incurred on behalf of, or for the benefit of all employees. Include payments in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary. Include employee compensation costs which are capitalized. (Same as item 130) (See general instructions, page)	$

If items 73, 74, 75, and 76 are each less than $3,000,000.00 then PART IV, FINANCIAL SCHEDULES need not be completed for foreign affiliate UNLESS foreign affiliate has an equity investment in another foreign affiliate of the U.S. Reporter and that foreign affiliate is required to complete PART IV, FINANCIAL SCHEDULES. That is, all affiliates upward in a chain of ownership from an affiliate for which a complete report must be filed, must file a complete report.

D-5

Part IV-FINANCIAL SCHEDULES – (Insurance companies, banks, or airline stations, see *special instructions, page 6*)
REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS

BALANCE SHEET	Opening and closing balances: Closing (a)	Opening (b)
● ASSETS ●		
82. **Cash items** – Deposits in financial institutions and other cash items. Exclude overdrafts.	$	$
83. **Trade accounts and notes receivable** – Net of allowances for doubtful items		
84. **Other current receivables** – Net of allowances for doubtful items		
85. **Inventories** – Excluding land held for resale		
86. **Other current assets** – Include land held for resale and other current assets not included above.		
87. **Property, plant and equipment, net** – Land, timber, mineral rights, structures, machinery, and equipment, owned by affiliate, including those leased to others by affiliate at historical cost, before deduction of accumulated depreciation, depletion, amortization, and like charges. Include special tools, construction in progress, and capitalized exploration and development costs. Exclude intangible assets and land held for resale (a) b. accum. depr., depl., etc		
88. **Equity investment in affiliates for which this affiliate is reporting as a parent** – Equity investment, including equity in undistributed earnings since acquisition, in all other reported foreign affiliates of U.S. Reporter(s), including branches of this affiliate		
89. **Other non-current assets** – Intangible assets, net of amortization, investments in and advances to U.S. Reporter(s), other stocks and bonds, and other non-current assets not included above.		
90. **TOTAL ASSETS** (Sum of items 82 through 89) ▶ Unincorporated affiliate – Must equal sum of items 96 and 97 ▶ Incorporated affiliate – Must equal sum of items 96 and 102 ▶	$	$
● LIABILITIES ●		
91. **Trade accounts and notes payable**	$	$
92. **Current portion of long-term debt**		
93. **Other current liabilities** – Overdrafts and other current liabilities, not included above, having an original maturity of one year or less		
94. **Long-term debt (excluding current portion)** – Debt having an original maturity of more than one year, excluding current portion due		
95. **Other liabilities** – All liabilities which cannot be classified according to original maturity or due date. Include any underlying minority interest which arises out of the consolidation of more than one foreign affiliate. (However, the equity of a direct minority ownership interest in affiliate is not to be separated from the normal equity accounts.)		
96. **TOTAL LIABILITIES** (Sum of items 91 through 95) ▶	$	$
● OWNERS' EQUITY ●		
▶ Unincorporated affiliate 97. **TOTAL OWNERS' EQUITY IN UNINCORPORATED AFFILIATE** – Home office account of a branch, net proprietorship account, partnership accounts, or equity accounts of other unincorporated affiliate (Equals item 90 minus item 96) ▶	$	$
▶ Incorporated affiliate 98. **Capital stock** – Common and preferred capital stock issued and outstanding	$	$
99. **Additional paid-in-capital** – All invested or contributed capital in addition to or in excess of capital stock		
100. **Retained earnings** – Earnings retained by corporation and legally available for declaration of dividends. Include those which have been voluntarily restricted.		
101. **Surplus reserves** – *Specify* ↙		
102. **TOTAL OWNERS' EQUITY FOR INCORPORATED AFFILIATE** (Sum of items 98 through 101, must equal item 90 minus item 96) ▶	$	$
PROPERTY, PLANT, AND EQUIPMENT		
103. **Gross cost of property** – Land, timber, and mineral rights owned by affiliate, including those leased to others by affiliate, at historical cost. Exclude intangible assets, land held for resale, and capitalized exploration and development costs.	$	$
104. **Accumulated depletion, etc. of property** – Accumulated depletion and like charges against the gross cost of property included in item 103		
105. **Gross cost of plant and equipment** – Plant and equipment owned by affiliate, including those leased to others by affiliate, at historical cost. Include all structures, machinery, and equipment, including special tools, construction in progress, and capitalized exploration and development costs. Exclude intangible assets.		
106. **Accumulated depreciation, depletion, etc. of plant and equipment** – Accumulated depreciation, depletion, and like charges against the gross cost of plant and equipment included in item 105		
107. **Property, plant and equipment, net** (Sum of items 103 and 105 minus sum of items 104 and 106, must equal item 87)	$	$

INCOME STATEMENT	For the year (a)
● INCOME ●	
108. **Net sales or gross operating revenues** – Net sales (sales minus returns, allowances, and discounts) or gross operating revenues, both inclusive of sales or consumption taxes levied directly on the consumer, net value-added taxes, and excise taxes levied on manufacturers, wholesalers, and retailers	$
109. **Sales taxes** – The amount included in "Net sales or gross operating revenues," item 108, which represents sales or consumption taxes levied directly on the consumer, net value-added taxes, and excise taxes levied on manufacturers, wholesalers, and retailers	
110. **Net sales or gross operating revenues excluding sales taxes** (item 108 minus item 109)	
111. **Equity in net income of other affiliates** – Equity in net income, after foreign income taxes, of other reported foreign affiliates for which an equity investment is reported in item 88	
112. **Other income** – Realized and unrealized gains resulting from changes in exchange rates (include at the time they are recognized), gains on sales of property, plant, and equipment items, other extraordinary gains, non-operating income, and other income not included above. *Specify* ↙	
113. **TOTAL INCOME** (Sum of items 110, 111, and 112) ▶	$
● COSTS AND EXPENSES ●	
114. **Cost of goods sold** – Operating expenditures which relate to net sales or gross operating revenues excluding sales taxes (item 110). Include production royalty payments to foreign governments, their sub-divisions and agencies. Include depletion charges representing the amortization of the actual cost of capital assets, but excluding all other depletion charges	$
115. **Selling, general and administrative expenses**	
116. **Foreign income taxes** – Provision for foreign income taxes for reporting period. Do not include U.S. income taxes. Exclude production royalty payments to foreign governments, their sub-divisions and agencies.	
117. **Other costs and expenses** – Realized and unrealized losses resulting from changes in exchange rates (include at the time they are recognized), losses on retirement or sale of property, plant and equipment items, other extraordinary losses, non-operating expenses, underlying minority interest in profits which arise out of consolidating more than one foreign affiliate on this report form, and other costs and expenses not shown above (However, the equity of a direct minority interest in affiliate is not to be separated from the normal income accounts.) – *Specify* ↙	
118. **TOTAL COSTS AND EXPENSES** (Sum of items 114 through 117) ▶	$
● NET INCOME ●	
119. **Net income** – After provision for foreign income taxes, but before dividends on common and preferred stock (item 113 minus item 118)	$
SUPPLEMENTARY DATA	
120. **Dividends received** – Dividends in cash or in kind, on both common and preferred stock, received by or credited to affiliate by any payor, net of tax withheld at the source, but excluding stock and liquidating dividends	$
121. **Interest received** – Total received by or credited to affiliate by any payor, net of tax withheld at the source	
122. **Interest paid** – Total paid, gross of tax withheld, by affiliate to all payees	
123. **Production royalty payments to foreign governments** – Payments to foreign governments, their sub-divisions and agencies of production royalties for natural resources	
124. **Taxes (other than income and payroll taxes) and non-tax payments to foreign governments (other than production royalty payments)** – Include tax liabilities other than income and payroll taxes, net of refunds or credits, paid or accrued to foreign governments, their sub-divisions and agencies by this affiliate for the year. Include value-added, sales, consumption and excise taxes, property and other taxes on the value of assets or capital, any remaining taxes (other than income or payroll taxes), and all payments of non-tax liabilities to foreign governments (except production royalty payments) such as import and export duties, license fees, fines and penalties, and similar items	
125. **Research and development (R&D) expenditures, total** – Include all costs incurred including depreciation, wages and salaries, taxes, cost of materials and supplies, and allocated overhead (but excluding capital expenditures) by affiliate to support R&D performed in facilities owned or operated by affiliate. Include costs of R&D performed by affiliate for its own benefit, and costs of R&D performed by affiliate for others on contract. Exclude costs of R&D performed for this affiliate by others.	
126. **Payments of fees and royalties to U.S. persons other than the U.S. Reporter(s)** – Include royalties, license fees, and other payments for the use or sale of intangible property paid or accrued by affiliate.	
127. **Receipts of fees and royalties from U.S. persons other than the U.S. Reporter(s)** – Include royalties, license fees, and other receipts for use or sale of intangible property paid or accrued to affiliate.	$

FORM BE-109 (8-7-74) DRAFT

D-6

Part IV-FINANCIAL SCHEDULES → Continued (If actual figures are not available give best estimates)

EMPLOYMENT AND EMPLOYEE COMPENSATION

In addition to employment and employee compensation relating to current operations, these items are to be reported inclusive of employment and employee compensation related to capitalized activities. See general instructions, page for requirements and definitions.

Enter actual number of employees

		U.S. citizens (a)	Foreign personnel (b)
	● EMPLOYMENT ●		
128.	TOTAL EMPLOYMENT - The equivalent to the average number of full-time employees for the year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or released during the year should also be included at the appropriate percentage. (Sum of items 129 and 130)		
129.	Production workers - Employees reported in item 128 who are engaged in production or related activities at or below the working supervisory level	US + Foreign	
130.	Non-production workers - Employees reported in 128 who are not engaged in production or related activities (Sum of items 131 through 134)		
131.	Managerial employees - Non-production workers engaged in management activities, excluding managers engaged in R&D work		
132.	Research and development scientists and engineers, including managers engaged in R&D work		
133.	Other professional and technical employees - Non-production workers engaged in professional and technical work other than research and development or managerial activities		
134.	Other non-production workers (item 130 minus sum of items 131, 132, and 133)		

		Compensation - Report all amounts in thousands of U.S. dollars		
	● EMPLOYEE COMPENSATION ●	Total (a)	Production workers (b)	Non-production workers (c)
135.	Employee compensation - Include all payments to and all other costs incurred on behalf of, or for the benefit of, all employees. Include payments in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary. (Sum of items 136, 137, and 138)	redefine to equal 136+137 $	$0	$
136.	Wages and salaries - Include employees' gross earnings (before any payroll deductions); vacation, other leave, and sick pay; paid bonuses; commissions, except to independent sales personnel; and the cash equivalent of bonuses and salaries paid in kind.			
137.	Cost of employee benefit plans - Include costs for plans (whether legally required or voluntary) such as employer contributions to social insurance funds, group health and life insurance, private pension, supplemental unemployment compensation, deferred profit sharing, etc.			
138.	Other labor costs - Include costs for such items as vacation and recreational facilities, employee training costs, in-house medical facilities, free parking, discounts on employees' purchases, operating losses on company-owned cafeterias, etc.	$	$ 8	

DISTRIBUTION OF SALES OR OPERATING REVENUES

If a detailed breakdown of exports to other countries is not available, enter the estimated percentage breakdown in columns (c) and (e).

		Total (a)	Sales by the U.S. Reporter(s) or its (their) foreign affiliates Amount (b)	Percent (c)	Sales to outside customers Amount (d)	Percent (e)
139.	Net sales or gross operating revenues excluding sales taxes. The amount in the total column should equal item 110 (Sum of items 140, 141, and 142)	$	$	%	$	%
140.	Sales in affiliate's country of location			%		%
141.	Exports to the United States			%		%
142.	Exports to other countries (Sum of items 145 through 152)			100 %		100%
143.	Canada			%		%
144.	Latin American Republics and other Western Hemisphere			%		%
145.	United Kingdom			%		%
146.	Belgium, France, Italy, Luxembourg, Netherlands, West Germany			%		%
147.	Ireland and Denmark			%		%
148.	Other Western Europe			%		%
149.	Eastern Europe			%		%
150.	Japan			%		%
151.	Australia, New Zealand, and South Africa			%		%
152.	Other Asia and Africa	$	$	%	$	%

SUPPLEMENTAL INSTRUCTIONS - FOR INSURANCE COMPANIES, BANKS, AND AIRLINE STATIONS - These special instructions are intended to supplement or supplant the instructions given elsewhere on the form, if problems should arise in applying these instructions or in reporting other specific line items, contact this Bureau at (202) 523-0652.

● INSURANCE COMPANIES ●

When there is a difference, the Financial Schedules are to be prepared on the same basis as an annual report to the stockholders, rather than on the basis of an annual statement to an insurance department. Valuation should be according to normal commercial accounting procedures, not at the rates promulgated by the National Association of Insurance Commissioners or equivalent foreign agency. Include assets not acceptable for the annual statement to an insurance department.

Items

85 Trade accounts and notes receivable - Include current items such as agents' balances or uncollected premiums, amounts recoverable from reinsurers, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

91 Trade accounts and notes payable - Include current items such as loss liabilities, policy claims, commissions due, and other current liabilities, arising from the ordinary course of business. (Policyreserves are to be included in "Other liabilities," item 115, unless they are clearly current liabilities.)

108 Net sales or gross operating revenues - Include items such as earned premiums, annuity considerations, gross investment income, and items of a similar nature. Exclude income from other foreign affiliates of the U.S. Reporter(s), which is to be reported in item 111.

114 Cost of goods sold - Include costs relating to net sales or gross operating revenues, item 110, such as policy losses incurred, death benefits, matured endowments, other policy benefits, increases in liabilities for future policy benefits, other underwriting expenses, and investment expenses.

● BANKS ●

Items

85 Trade accounts and notes receivable - Include current items such as current portion of loans, customer's liability to the bank on outstanding acceptances, and other current notes and accounts (net of allowances for doubtful items) arising from the ordinary course of business.

91 Trade accounts and notes payable - Include current items such as deposits, acceptances, and other current liabilities arising from the ordinary course of business.

● FOREIGN AIRLINE STATIONS (BRANCH OR INCORPORATED) ●

a. In the Identification Section, item 19, mark "Other," and specify "foreign airline station."

b. The Balance Sheet should reflect assets located in the station, such as buildings or leaseholds, inventories of fuel or spare parts, office equipment, maintenance and repair equipment, and items of a similar nature. Transit aircraft should be excluded.

c. Item 118 of the Income Statement should show all costs and expenses of the station including depreciation. Item 118 should be broken down into the categories in items 114 through 117. Item 108 should be the amount in item 118 plus the profit imputed to the performance of service for or sales to outside customers (excluding ticket sales or freight revenues generated).

d. Employment and employee compensation should relate only to station personnel. Exclude all air crews and flight personnel.

D-7

Part IV-FINANCIAL SCHEDULES - CONTINUED - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS (If actual figures are not available give best estimates)

MERCHANDISE TRADE

# U.S. MERCHANDISE EXPORTS TO FOREIGN AFFILIATE # (See general instructions, page for details of data requirements)		Total (a)	Shipped by the U.S. Reporter(s): Products of the U.S. Reporter(s) (b)	Shipped by the U.S. Reporter(s): Products of others (c)	Shipped by other U.S. persons: Products of others (d)
153. Goods shipped to affiliate from the United States, f.a.s. U.S. port (Equals sum of items 154 through 163 and equals sum of items 164 through 168)		$	$	$	$
BY PRODUCT (See "Export and Import Trade Classifications" part of the Industry Classifications and Export and Import Trade Classifications booklet)	SITC codes				
154. Food, beverages, and tobacco	0 - 1				
155. Inedible crude materials, except fuels	2				
156. Petroleum and products, excluding natural gas	33				
157. Chemicals	5				
158. Machinery, electrical and non-electrical	71 - 72				
159. Road motor vehicles and parts	732				
160. Other transportation equipment	73 excluding 732				
161. Metal manufactures	67, 68 and 69				
162. Other manufactures	61 through 66 and 8				
163. All other	3(excluding 331), 4, and 9				
BY INTENDED USE					
164. For further processing or assembly					
165. For resale without further manufacture					
166. Capital equipment for lease or rental by affiliate to others					
167. Capital equipment for use by affiliate					
168. Other- Specify-		$	$	$	$

# U.S. MERCHANDISE IMPORTS FROM FOREIGN AFFILIATE # (See general instructions, page for details of data requirements)		Total (a)	Shipped to the U.S. Reporter(s): Products of affiliate (b)	Shipped to the U.S. Reporter(s): Products of others (c)	Shipped to other U.S. persons: Products of affiliate (d)	Shipped to other U.S. persons: Products of others (e)
169. Goods shipped by affiliate to the United States, f.o.b. foreign port (Sum of items 170 through 179)		$	$	$	$	$
BY PRODUCT (See "Export and Import Trade Classifications" part of the Industry Classifications and Export and Import Trade Classifications booklet)	SITC codes					
170. Food, beverages, and tobacco	0 - 1					
171. Inedible crude materials, except fuels	2					
172. Petroleum and products, excluding natural gas	33					
173. Chemicals	5					
174. Machinery, electrical and non-electrical	71 - 72					
175. Road motor vehicles and parts	732					
176. Other transportation equipment	73 excluding 732					
177. Metal manufactures	67, 68 and 69					
178. Other manufactures	61 through 66 and 8					
179. All other	3(excluding 331), 4, and 9	$	$	$	$	$

NON-UNITED STATES MERCHANDISE TRADE OF FOREIGN AFFILIATE #	Total (a)	Trade with Foreign affiliates of the U.S. Reporter(s) (b)	Trade with other foreigners (c)
180. Merchandise exports shipped by affiliate to non-United States persons	$	$	$
181. Merchandise imports shipped to affiliate by non-United States persons			

COMMERCE USE ONLY

D-8

Part IV-FINANCIAL SCHEDULES - CONTINUED - REPORT ALL AMOUNTS IN THOUSANDS OF U.S. DOLLARS(If actual figures are not available give best estimates)

SURPLUS RECONCILIATION

● RECONCILIATION OF RETAINED EARNINGS OF ● UNINCORPORATED AFFILIATE, OR OWNERS' EQUITY FOR UNINCORPORATED AFFILIATE (Items 182 plus 183 minus Item 184 plus Item 185 must equal Item 186)	Amount (a)
182. Opening balance - Unincorporated affiliate enter amount from Item 99, column b (corporate affiliate enter amount from Item 100, column b)	$
183. Net income, after provision for foreign income taxes (Amount from Item 119)	
184. Dividends or net income remitted to owners - Incorporated affiliate enter amount of dividends declared on common and preferred stocks, excluding stock dividends - Unincorporated affiliate enter amount of net income remitted to owners	
185. Other changes, increase or (decrease), including stock and liquidating dividends for incorporated affiliate - Specify	
186. Closing balance(must equal Item 182 plus 183 minus 184 plus 185) - Unincorporated affiliate enter amount from Item 97, column l; Incorporated affiliate enter amount from Item 100, column l	y#
● CHANGES IN ADDITIONAL PAID-IN-CAPITAL ● AND SURPLUS RESERVES - CORPORATIONS ONLY	
187. Change in "Additional paid-in-capital" - Specify items causing difference between opening and opening balances, Item 99, column a minus column b	$
188. Change in "Surplus Reserves" - Specify items causing difference between closing and opening balances, Item 97, column a minus column b	#

PETROLEUM AND MINING EXPLORATION AND DEVELOPMENT EXPENDITURES

	Expenditures during the year (a)
189. Total exploration and development expenditures (Sum of Items 190 and 191)	$
190. Charged against income (included in Item 214 or 117)	
191. Capitalized (included in Item 204)	$
COMMERCE USE ONLY	

STATEMENT OF CHANGES IN FINANCIAL POSITION

● SOURCES OF FUNDS ●	For the year (a)
192. Net income after provision for foreign income taxes (Enter amount from Item 119)	$
193. Depletion, etc. - Charge to the income statement relating to gross cost of property as defined for Item 105	
194. Depreciation, etc. - Charge to the income statement relating to gross cost of plant and equipment as defined for Item 104	
195. Amortization - Charge to the income statement for amortization and like charges against intangible assets, and similar items, included in Item 89	
196. Retirement and sales of property, plant, and equipment - Net book value of assets at time of retirement or sale (exclusive of any gains or losses (such gains or losses should be shown in the income statement)	a. Sales b. Retirements
197. Change in owners' equity in unincorporated affiliate - Exclude the effect of net income shown in Item 119 and net income remitted to owners shown in Item 184	
198. Sales or purchases of capital stock (incorporated affiliate only) - Sales of additional capital stock, net of repurchases by affiliate of its outstanding capital stock, including any contributions to capital not resulting in issuance of capital stock, but excluding stock dividends	
199. Change in total liabilities (Item 96, closing balance minus opening balance)	
200. Other sources - Specify g	
201. TOTAL SOURCES (Sum of Items 192 through 200 must equal Item 209)	g
● APPLICATIONS OF FUNDS ●	
202. Change in current assets - Total difference between opening and closing balances of the balance sheet current asset accounts (Items 82 through 86, column a minus column b)	g
203. Expenditures for property - Expenditures for the acquisition of land, timber, and mineral rights, used by affiliate or leased to others, Exclude those for intangible assets, land held for resale, and capitalized exploration and development costs; covers those property items charged to the balance sheet net property, plant and equipment account, Item 87, and shown separately as Item 103.	
204. Expenditures for plant and equipment - Expenditures for acquisition and improvement of structures, machinery, and equipment, used by affiliate or leased to others, including those for special tools, construction in progress, and capitalized exploration and development costs. Exclude those for expensed repairs and intangible assets. Covers plant and equipment items charged to the balance sheet net property, plant and equipment account, Item 87, and shown separately as Item 105.	
205. Other additions to (subtractions from) property, plant and equipment account, Item 87 - Specify g	
206. Dividends or net income remitted to owners - Incorporated affiliate enter amount of dividends declared on common and preferred stock excluding stock and liquidating dividends - Unincorporated affiliate enter amount of net income remitted to owners (Same as Item 184)	
207. Change in equity investment in affiliates for which affiliate is reporting as a parent - Total difference between the opening and closing balances of balance sheet, Item 88, column a minus column b'	
208. Change in other non-current assets - Total difference between the opening and closing balances of balance sheet other non-current assets account (Item 84, column a minus column b)	
209. TOTAL APPLICATIONS (Sum of Items 202 through 208, must equal Item 201)	$
If the opening balance for Item 87 plus sum of Items 203, 204, and 205 minus sum of Items 193, 194, and 196 does not equal the closing balance of Item 87, explain.	

COMPOSITION OF EXTERNAL FINANCING

● CLOSING BALANCES ●		Total (Sum of columns b through e) (a)	Financial position with - The U.S. Reporter(s) (b)	Other U.S. residents (c)	Foreign affiliates of the U.S. Reporter(s) (d)	Other foreign persons (e)
210. Current liabilities.(Sum of total column for Items 216a and b must equal sum of closing balances of Items 91, 92, and 93)	a. To banks	$	$	$	$	$
	b. To other than banks					
211. Long-term debt (excluding current portion) - (Sum of total column for Items 217a and b must equal the closing balance of Item 94)	a. To banks					
	b. To other than banks					
212. Current receivables.(Total must equal sum of closing balances of Items 83 and 84)						
213. Non-current receivables and financial investments.(Total must equal closing balance for part of Item 89 which is non-current receivables and financial investments)						
214. Capital stock or owners' equity - Incorporated affiliate, total column must equal sum of closing balance of Items 98 and 99; unincorporated affiliate, total column must equal closing balance of Item 97.						
215. TOTAL (Sum of Items 210 through 214)		$				
● OPENING BALANCES ●						
216. Current liabilities.(Sum of total column, Items 216a and b must equal sum of opening balances of Items 91, 92, and 93)	a. To banks	$	$	$	$	$
	b. To other than banks					
217. Long-term debt (excluding current portion) - (Sum of total column for Items 217a and b must equal opening balance of Item 94)	a. To banks					
	b. To other than banks					
218. Current receivables.(Total must equal sum of opening balances of Items 83 and 84)						
219. Non-current receivables and financial investments - (Total must equal opening balance for part of Item 89 which is non-current receivables and financial investments)						
220. Capital stock or owners' equity - Incorporated affiliate, total column must equal sum of opening balance of Items 98 and 99; unincorporated affiliate, total column must equal opening balance of Item 97						
221. TOTAL (Sum of Items 216 through 220)		$				

UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Economic Affairs
Washington, D.C. 20230

30 JUL 1975

Honorable Lee Metcalf
United States Senate
Washington, D. C. 20510

Dear Senator Metcalf:

This is in reply to your letter of July 17, 1975 to George Kruer, Chief, International Investment Division, Bureau of Economic Analysis, requesting information relating to the clearance of BEA's report forms on U.S. direct investment abroad by the National Advisory Council on International Monetary and Financial Policies (NAC).

The documents enclosed relate to the review of the form--which was sent to your office on Tuesday, July 18, 1975 by Mr. Kruer's office--during the clearance process. Much of the work was conducted at meetings of the Working Group or by telephone and no detailed records exist. Mr. Kruer's memorandum to James A. Griffin dated July 30, 1974 was prepared after it became apparent that the Working Group was going to recommend substantial cuts in the form. It was an attempt to justify the form as it was originally proposed and to forestall major cuts in the form. The attempt was unsuccessful.

The memorandum of August 13, 1974 from Mr. Griffin to the NAC Working Group summarizes the results of the meetings and contains a draft of a report to the NAC staff committee chairman, Robert Watson.

The final report was sent by Mr. Griffin to Mr. Watson on August 23, 1974, NAC Staff Document 74-24. Since the NAC possesses the report you request and labels all its papers "For NAC Use Only," copies of the report should be requested directly from the NAC.

At a subsequent NAC staff meeting, the Working Group was instructed to meet again to decide which of the items labelled "questionable" were to be retained or deleted. The NAC staff wanted a firm overall proposal from the Working Group rather than considering individual items.

Given that the "delete" items were out and subsequent discussions showed that the "questionable" ones would become "deletes," the matter was not pursued further. BEA decided that the truncated survey would not provide data essential for the analysis of U.S. direct investment abroad, and chose to review the possibility of seeking new and specific legal authorization for the survey. Such a review is continuing.

I would like to underline the fact that no member of the Working Group felt that the deleted data were unnecessary for analysis and policy purposes, but rather it was felt that the legal authority to collect data pursuant to the Bretton Woods Agreements Act did not cover the deleted items.

Sincerely,

James L. Pate

JAMES L. PATE
Assistant Secretary for
Economic Affairs

Enclosures (2)

56-957 O - 75 - 4

U.S. Department of Commerce,
Social and Economic Statistics Administration,
Bureau of Economic Analysis,
Washington, D.C., July 30, 1974.

To: James A. Griffin, Chairman, NAC Working Group on Foreign Investment Surveys.
From: George R. Kruer, Chief, International Investment Division.
Subject: Survey of U.S. Direct Investments Abroad.

With reference to the July 12, 1974, meeting of the NAC Working Group on Foreign Investment Surveys, and the view expressed by some members that the information requested in the proposed Survey covering 1973 of U.S. Business Investments Abroad may exceed the legal authority conferred by the Bretton Woods Agreement Act, I wish to raise the following points for consideration by the Working Group: (1) a review of the Articles of Agreement of the IMF, which specifies the data to be furnished the Fund upon request and its relevance to the 1973 survey; (2) a review of the justification given by the NAC for its approval of the Survey of U.S. Business Investments Abroad taken for 1966; and (3) a comparison of the proposed 1973 survey with the 1966 survey to illustrate their similarity. These points support the view that the proposed survey is substantially the same in content as was the 1966 survey approved by the NAC. Although the number of questions on the 1973 survey may exceed the number of questions on the 1966 survey, the additional questions primarily reflect an attempt to improve the quality of the data collected rather than to enlarge the scope of the survey. The similarity between the past and proposed surveys, the record of previous action by the NAC in approving such surveys, and the continuing need of the U.S. Government for the data to be collected in order to comply with standing requests of the IMF and IBRD, justify approval by the NAC of the proposed survey. Since experience has shown that mandatory reporting is essential for a satisfactory response, we have requested NAC approval to conduct this survey under the mandatory authority of the Bretton Woods Agreement Act.

Information Requested By the IMF

To evaluate the standing request of the IMF to the U.S. Government to furnish data to the IMF, it is important to consider Article VIII, section 5, of the Articles of Agreement of the Fund, in its entirety.

section e. furnishing of information

(a) The Fund may require members to furnish it with such information as it deems necessary for its operations, including, as the minimum necessary for the effective discharge of the Fund's duties, national data on the following matters:

(i) Official holdings at home and abroad, of (1) gold, (2) foreign exchange.

(ii) Holdings at home and abroad by banking and financial agencies, other than official agencies, of (1) gold, (2) foreign exchange.

(iii) Production of gold.

(iv) Gold exports and imports according to countries of destination and origin.

(v) Total exports and imports of merchandise, in terms of local currency values, according to countries of destination and origin.

(vi) International balance of payments, including (1) trade in goods and services, (2) gold transactions, (3) known capital transactions, and (4) other items.

(vii) International investment position, i.e., investments within the territories of the member owned abroad and investments abroad owned by persons in its territories so far as it is possible to furnish this information.

(viii) National income.

(ix) Price indices, i.e., indices of commodity prices in wholesale and retail markets and of export and import prices.

(x) Buying and selling rates for foreign currencies.

(xi) Exchange controls, i.e., a comprehensive statement of exchange controls in effect at the time of assuming membership in the Fund and details of subsequent changes as they occur.

(xii) Where official clearing arrangements exist, details of amounts awaiting clearance in respect of commercial and financial transactions, and of the length of time during which such arrears have been outstanding.

(b) In requesting information the Fund shall take into consideration the varying ability of members to furnish the data requested. Members shall be under no obligation to furnish information in such detail that the affairs of individuals or corporations are disclosed. Members undertake, however, to furnish the desired information in as detailed and accurate a manner as is practicable, and, so far as possible, to avoid mere estimates.

(c) The Fund may arrange to obtain further information by agreement with members. It shall act as a centre for the collection and exchange of information on monetary and financial problems, thus facilitating the preparation of studies designed to assist members in developing policies which further the purposes of the Fund."

The list of items contained in section 5, are "the minimum necessary for the effective discharge of the Fund's duties." Of the specific items listed, items (v), (vi), (vii), and (viii) describe data items we obtain in the survey. With reference to item (viii), the survey will permit the computation of value added for foreign affiliates and U.S. parents. Items (ix) and (x) could have been covered in the survey but were not because of the already extensive reporting required and the difficulty of obtaining such data without substantially increasing reporting. For 1966, affiliates were required to report data in foreign and U.S. currencies. This requirement for foreign currency reporting has been eliminated due to the difficulty of using data previously reported.

It should also be noted that section 5 provides that the Fund "will consider the varying ability of members to furnish the data requested. . . . Members undertake to furnish the desired information in as detailed and accurate a manner as is practicable, and so far as possible, to avoid mere estimates."

The data requested by the IMF through Article VIII goes substantially beyond the request for a single balance of payments capital flow item or investment position item, which in this case could most narrowly be construed as the scope of a survey of U.S. direct investments abroad. It should also be recognized that the proposed survey attempts to measure all of the relevant balance of payments transactions and the investment position arising between U.S. parents and their foreign affiliates. Various transactions between U.S. parents and their foreign affiliates are specifically identified within the U.S. balance of payments accounts whenever they can be separately identified. The benchmark survey has in the past and should continue to obtain data on the full range of these transactions. Furthermore, as in the past, the operating data reported as financial statement items should continue to be obtained as a basis for evaluating the reliability and the significance of the balance of payments items we wish to measure. Section 5, subsection (c) which states that the Fund "shall act as a centre for the collection and exchange of information on monetary and financial problems, thus facilitating the preparation of studies designed to assist members in developing policies which further the purposes of the Fund" is also subject to a broad interpretation. The multinational enterprise operations are ceretainly an integral part of international monetary and financial developments, problems, and policies.

NAC ACTION 67–171 JUNE 6, 1967, RELATING TO THE 1966 SURVEY

When considering whether the proposed survey is necessary in order for the U.S. Government to comply with official requests from the IMF for balance of payments information, members of the Working Group should review carefully the criteria for the NAC approval of the 1966 Survey of U.S. Business Investments Abroad as summarized in the annual report of the NAC covering July 1, 1966, to June 30, 1976. The full text of the relevant section of that report is attached.

COMPARISON OF THE 1966 AND THE 1973 SURVEYS

The U.S. multinational company (MNC) covered by the Survey of U.S. Business Investments Abroad—1973 is defined exclusively by the criteria used to define U.S. direct investments abroad for balance of payments purposes. Therefore, the universe of U.S. parent companies consists of those companies

and their domestic affiliates who have direct investments abroad. The foreign component of the U.S. MNC consists of the foreign affiliate in which the fully consolidated U.S. enterprise reporter has direct investments. The basic definitions of U.S. parent companies and their foreign affiliates are virtually the same in the 1973 as in the 1966 survey.

For the 1966 survey one report form, called the "A–Form," collected data for U.S. parent companies while several report forms, including a "B-Form" for allied foreign affiliates (those in which U.S. ownership exceeded 25 percent), two other specifically designed B–Forms for foreign affiliates which are finance and insurance companies, and a "C–Form" for associated foreign affiliates (those in which U.S. ownership was between 10 and 25 percent) collected data for foreign affiliates. For the 1973 survey there is one form, the A–Form, to collect data for U.S. parent companies, and only one form, the B–Form, to collect data for all foreign affiliates.

The scope and content of the B–Form for foreign affiliates in the 1966 and the proposed 1973 surveys are virtually identical. They both ask for the same general types of information—financial statements, data on investment between parents and affiliates, employment and U.S. merchandise trade data, and statements of changes in financial position. Within the various sections of the B–Form, some changes in detail have been made. These changes were primarily for clarification, to fill in gaps in the 1966 survey which greatly limited the usefulness of the 1966 data, or to simplify processing and reporting. In many cases, any addition of items to a section of the B–Form was offset by deletions of items. The only major changes in scope were made on the A–Form for U.S. parents. These, and the changes in detail on the B–Form are discussed below.

Although the 1973 A–Form is slightly abbreviated compared to the 1973 B–Form, the A–Form has been expanded from the 1966 parent form. The A–Form was expanded as a result of the difficulties encountered in processing and analyzing the data for U.S. parent and foreign affiliate transactions when the two sets of data on the A and B–Forms were not parallel. We found that parellel reporting is necessary if the entire MNC—both its U.S. and foreign components—is to be considered as a whole. Furthermore, since the U.S. parent is, for U.S. balance of payments purposes, the principal U.S. transactor of concern, we have expanded reporting for the consolidated domestic enterprise to more fully analyze the role of the U.S. parent. A comparison of the 1966 and 1973 A–Forms will indicate an expansion of financial statements, and the addition of data for U.S. employment and employee compensation. The latter were added because of the interest in recent years in whether MNCs seek to invest in areas of low wages and whether this investment results in the export of U.S. jobs. Among other uses, financial statement items such as employee compensation will permit the computation of value added for U.S. parents.

Part of the expansion of the A–Form is also related to one of the most important changes introduced in the 1973 survey—the integration of items such as financial position, trade, sales, or other data items for which country or other detail are requested, with items reported in the financial statements of the affiliate and the U.S. parent. When detail items are subsets of an aggregated financial statement item, their relationship to the more aggregated item is clearly specified. This integration should not only facilitate editing and processing, but also should improve the definitions, consistency, and accuracy of data items included in the survey.

The A and B Forms contain two sections, one for trade items and one for the industry classification of the entity being reported—the U.S. parent or the foreign affiliate—which may give an initial appearance of an increased reporting burden. Upon closer examination, it is evident that a change has been made only in reporting method with the objectives of reducing processing time and improving the data. The data to be reported are more or less the same as for 1966. For example, the survey for 1966 asked Reporters to list the countries against which the Reporter will enter exports. This list looks longer than in 1966 when the Reporter was asked to list the countries himself. We are asking for no additional data, but the preprinted country lines means they are precoded, and therefore saves us processing time and eliminates errors since there is a possibility of error each time a person has to enter a code.

The other example is the industry classification of the Reporter or the foreign affiliate obtained on the A and B Forms respectively. In 1966, the Reporter was asked to give a written description of its own and each of its affiliates "type of business." This led to many telephone calls to Reporters and considerable time expended on researching public information (Moody's, Standand Poor's) in order to be able to assign an industry classification to both Reporters and affiliates. On the 1973 A and B Forms, an entire page of the form will consist of preprinted, and precoded, industry classifications against which a Reporter is to enter his percentage of sales, for those categories accounting for over 5 percent of sales. This takes up a large amount of space on the form and therefore may give the appearance of an increase in Reporter burden. This is not the case. Based on our experience with the 1970 minicensus and the recent Sources and Applications survey, the "typical" affiliate will probably make only about 4 entries. There will always be the "conglomerated" types with many entries, but these will be offset by the single industry types, such as crude oil producing affiliates. The offset to any possible increase in Reporter burden is the very real gain we make in reducing processing effort and time by using precoded industry blocks. These types of changes are the ones that will insure that the results of the 1973 survey will be available with a sharply reduced time lag compared with the previous survey and with increased accuracy.

The 1966 survey included, in addition to the A, B, and C Forms, separate forms to record foreign trade—the E-S Form on which exports of the parent were reported and the E Form on which imports from the U.S. by the affiliate were reported. This type of information will be collected in the 1973 survey but within the A Form and B Form. Eliminated are the duplication of items reported on the E and E–S Forms and certain questions on the intended use of goods traded, and the separate reporting of goods charged and goods consigned for export. The 1973 A–Form asks for data on imports where previously sales data reported by foreign affiliates were used as a proxy and data on imports by U.S. Reporters from unaffiliated foreigners were not obtained at all. We have added questions to obtain a product break of both affiliate and parent trade. Since trade is measured in the U.S. balance of payments accounts on a "when and where shipped" rather than "when and where charged" basis, we have adopted this criterion to define the merchandise trade, and have eliminated the reporting of exports on both bases which greatly complicated the 1966 survey. The net effect of these changes is probably nil in terms of number of items to be reported.

As mentioned above, the 1966 survey also contained separate B Forms for finance and insurance companies, which are treated as exceptions when measuring direct investments for the U.S. balance of payments accounts or the international investment position where there is special accounting treatment of financial records. To standardize reporting and to simplify the processing of the data, we have incorporated all special industry reporting within the format of the A and B Forms and included special instructions where necessary.

Data for sources and applications of funds were collected for 1966 for foreign affiliates solely as "change" data. For the 1973 survey, part of them are being collected as "change" data, but some are to be derived as the difference between the beginning-of-year and end-of-year balances. Obtaining data on both stocks and flows will permit stock/flow analyses of external sources of funds and financial uses of funds. A transactor break is obtained in the survey for items such as sales or trade, to identify transactions of foreign affiliates with the U.S. Reporter, other foreign affiliates of the U.S. Reporter, other foreign residents, and other U.S. residents. Similarly, for sources and uses of funds, a transactor break will be obtained for stocks rather than for flows only, as was obtained for 1966. These data will give a complete picture of external financial transactions of the foreign affiliates. Data to be collected within the sources and applications of funds statements also include a reconciliation of the property, plant and equipment (PP&E) accounts found in the balance sheet. These data were also collected in 1966.

One section of Form B that was revised substantially for the 1973 survey is the Part II section collecting data on U.S. direct investments abroad. Additional questions are included primarily to refine data for direct investment capital flows by identifying non-flow items or transactions in the foreign affiliate's

stock which involve a country other than that of the foreign affiliate being reported. For 1966 similar questions were asked but not as specifically. Thus, reporting was inconsistent and required special attention or telephone calls to Reporters in processing, and the derived adjustments could not be put on computer.

Annual report of activities of the National Advisory Council on International Monetary and Financial Policies

Letter from Secretary of the Treasury, Chairman, National Advisory Council on International Monetary and Financial Policies

TRANSMITTING THE ANNUAL REPORT OF THE POLICIES AND OPERATIONS OF THE COUNCIL COVERING THE PERIOD JULY 1, 1966, TO JUNE 30, 1967

During the fiscal year, net gold sales by the United States to foreign countries totaled $232 million compared with sales of $378 million in fiscal year 1966. The substantial further reduction in the volume of gold sales continued the improved trend noted in the annual report a year ago. France was again the principal buyer, purchasing $277 million. All French purchases took place during the first fiscal quarter. The main offsets to this loss were receipts of gold from the United Kingdom and Canada totaling $175 million.

EXCHANGE AGREEMENTS

In May, the Council approved a request of the Government and Central Bank of Argentina for a $75 million, 1-year, exchange agreement with the U.S. Treasury. The Agreement supplements a $125 million IMF standby arrangement with Argentina announced by the Fund on May 1, 1967, and is intended to assist Argentina in promoting economic stability and freedom in its trade and exchange system. Under the terms of the Agreement, the United States may purchase Argentine pesos with dollars, and any pesos so acquired would be subsequently repurchased by Argentina.

An exchange of letters in June 1967 between Secretary of the Treasury Fowler and the Ambassador of Mexico, Hugo B. Margain, increased from $75 million to $100 million the amount of the existing 2-year exchange stabilization agreement between the United States and Mexico, signed in December 1965. The agreement provides for reciprocal swap facilities which will enable the financial authorities of either country to cooperate in the maintenance of stable and orderly conditions in the exchange markets.

SURVEY OF U.S. DIRECT INVESTMENTS ABROAD

During 1967 the Department of Commerce started on a comprehensive survey of American business investments in foreign countries to provide an accurate account of the amount of such investments at the end of 1966, the net increase in these investments during that year, the return on these investments, and their significance for the balance of payments of the United States and the foreign host countries. The data collected in the survey will establish a comprehensive statistical benchmark required for the accuracy of the statistical series on direct investment, and related transactions in the U.S. balance-of-payments accounts. The survey for 1966 is the latest in a series of similar surveys which have been undertaken at irregular intervals in the past.

Since experience had shown that mandatory reporting is essential for satisfactory results, the Commerce Department proposed to the National Advisory Council that the survey be undertaken pursuant to the mandatory authority in section 8 of the Bretton Woods Agreement Act. The two most recent surveys of direct investment (1950 and 1957), were conducted under this authority.

To make this authority operative, action by the NAC is required pursuant to Executive Order 10033. The Order provides that the National Advisory Council, in consultation with the Director of the Bureau of the Budget, shall determine what information is essential to enable the U.S. Government to comply with official requests from the International Monetary Fund; that the Director of the Bureau of the Budget shall designate the U.S. Government agency which

will collect the information, and that in the collection of information pursuant to such designation, the authority conferred on the President by section 8 of the Bretton Woods Agreements Act to furnish such information, by subpoena or otherwise, may be exercised by certain Government agencies, including the Department of Commerce.

On June 6, 1967, the National Advisory Council, after consultation with the Director of the Bureau of the Budget, determined that the collection of data for 1966 on American direct investments abroad is essential, in order that the U.S. Government may continue to comply with official requests from the International Monetary Fund for balance-of-payments information.

In making this determination, the National Advisory Council examined the nature and significance of U.S. direct investments abroad in the light of current conditions in the U.S. balance of payments, and the nature of current requests from the International Monetary Fund for information on the U.S. balance of payments. In this connection, the NAC took into consideration the following facts: Since 1957, the United States has had large and persistent balance-of-payments deficits and has introduced certain measures to discourage private capital outflow for the purpose of helping to hold the deficits within reasonable limits. These measures include the voluntary restraint program of the Department of Commerce, which applies to the direct investment operations of U.S. firms abroad. In recent years there have been large increases in the amount and complexity of these operations, and the direct investment activities of U.S. business enterprises are now of such magnitude and affect so many aspects of the U.S. balance of payments that adequate analysis requires a considerable amount of information on the details of the direct investment operations, as well as data on the amounts invested. The information on the U.S. balance of payments requested by the International Monetary Fund covers not only statistical data but also a broad range of inquiries into the major aspects of our balance of payments. Inquiries associated with the annual consultations of the International Monetary Fund with the United States cover among other things the nature and effects of private capital movements, an evaluation of the use of voluntary restraints on various forms of U.S. investments abroad, and inquiry into other aspects of private capital outflow.

* * * * * * *

UNITED STATES GOVERNMENT,
August 13, 1974.

MEMORANDUM

NAC Working Group.
To: NAC Working Group.
From: James A. Griffin, Chairman.
Subject: Commerce Department's Proposed Survey Forms for Outward Direct Investment.

Attached for your comment and clearance is a revised draft report to the NAC. The Working Group did not review Form A of the Commerce proposed questionnaire, which calls for information from and on the parent firms. However, rather than have the Group meet again, I went over Form A with George Kruer and we agreed that certain items should be treated as per the attached on the basis of the Group's views on similar type questions in Form B. These are only proposals for the approval of the Group however.

I have flagged some of the questions in Form A and Form B as "questionable" because I did not feel that there was a clear consensus on these items. In reporting to the NAC, however, I think we should, if possible, give them a clear yes or no on all items so I would ask you to focus on these items again and give me your views.

Also note that the draft memo states that the members of the Working Group will pursue the question of the feasibility of seeking legislation within their own agencies and in appropriate interagency forums.

Attachments.

NAC WORKING GROUP

Questions in Commerce Department's proposed form for Survey of U.S. Direct Investment Abroad as of end-73 which should be deleted or are questionable under Bretton Woods authority

Form A.

37–48, Income statement. *Questionable.*

49–51, Dividends received, interest received, interest paid. *Delete.*

53, Taxes, etc. *Questionable.*

54–55, Research and development. *Delete.*

58–61, Expenditures for property, plant and equipment, depletion and depreciation. *Questionable.*

62–75, Petroleum and mining exploration and development expenditures. *Questionable.*

76–125, Merchandise trade of U.S. reporter with foreigners other than foreign affiliates of U.S. reporters. *Questionable.*

Form B.

23, Inventory valuation method. *Delete.*

30, Number of establishments affiliate operates. *Delete.*

31, Licensing agreements with U.S. reporter. *Delete.*

80, Total employment. *Delete.*

81, Employee compensation. *Delete.*

103–107, Property plant and equipment. *Questionable.*

120–122, Dividends received, interest received, interest paid. *Delete.*

124, Taxes, etc. *Questionable.*

125, Research and development. *Delete.*

128–138, Employment and employee compensation. *Delete.*

140–142, Sales in affiliate's country of location, exports to U.S., exports to other countries. *Questionable.*

143–152, Geographic breakdown of exports to other countries. *Delete.*

154–168, Breakdown by product of goods shipped to affiliate from U.S. *Questionable.*

170–179, Breakdown by product of goods shipped by affiliate to U.S. *Delete.*

180-181, Non-U.S. merchandise trade of foreign affiliate. *Delete.*

DRAFT

Memorandum to: Robert Watson, Executive Secretary, National Advisory Council.

From: James A. Griffin, Chairman, NAC Working Group on Foreign Investment Surveys.

The Working Group met on July 12 and August 6, 1974, to consider a request by the Commerce Department for NAC approval to undertake a mandatory survey of U.S. direct investments abroad as of end–1973 under the authority of the Bretton Woods Agreements Act.

The Bretton Woods Agreements Act authorizes the President (through any agency he may designate) to require persons to furnish information which he determines to be essential to comply with requests from the International Monetary Fund for data under Article VIII of the Articles of Agreement of the IMF. The relevant section of Article VIII is as follows:

SECTION 5. FURNISHING OF INFORMATION

(a) The Fund may require members to furnish it with such information as it deems necessary for its operations, including, as the minimum necessary for the effective discharge of the Fund's duties, national data on the following matters:

(i) Official holdings at home and abroad, of (1) gold, (2) foreign exchange.

(ii) Holdings at home and abroad by banking and financial agencies, of (1) gold, (2) foreign exchange.

(iii) Production of gold.

(iv) Gold exports and imports according to countries of destination and origin.

(v) Total exports and imports of merchandise, in terms of local currency values, according to countries of destination and origin.

(vi) International balance of payments, including (1) trade in goods and services, (2) gold transaction, (3) known capital transactions and (4) other items.

(vii) International investment position, i.e., investments within the terri-

tories of the member owner abroad and investment abroad owned by persons in its territories so far as it is possible to furnish this information.

(viii) National income.

(ix) Price indices, i.e., indices of commodity prices in wholesale and retail markets and of export and import prices.

(x) Buying and selling rates for foreign currencies.

(xi) Exchange controls, i.e., a comprehensive statement of exchange controls in effect at the time of assuming membership in the Fund and details of subsequent changes as they occur.

(xii) Where official clearing arrangements exist, details of amounts awaiting clearance in respect of commercial and financial transactions, and of the length of time during which such arrears have been outstanding.

(b) In requesting information the Fund shall take into consideration the varying ability of members to furnish the data requested. Members shall be under no obligation to furnish information in such detail that the affairs of individuals or corporations are disclosed. Members undertake, however, to furnish the desired information in as detailed and accurate a manner as is practicable, and, so far as possible, to avoid mere estimates.

(c) The Fund may arrange to obtain further information by agreement with members. It shall act as a centre for the collection and exchange of information on monetary and financial problems, thus facilitating the preparation of studies designed to assist members in developing policies which further the purposes of the Fund.

Executive Order 10033 charges the NAC with determining, after consultation with the director of OMB, "what information is essential in order that the U.S. Government may comply with official requests for information" from the IMF or IBRD.

Although the IMF has not specifically requested that the U.S. furnish it with updated data on its international investment position at this time, Article VIII is considered a standing request for data which is reasonably accurate. Since the last surveys of the U.S. inward and outward direct investment positions were taken for the years 1959 and 1966 respectively, the Working Group considers that it is appropriate and desirable that surveys be undertaken in the near future in order to assure that the U.S. data are reasonably accurate.

However, the IMF has never given any specific instructions on what information it requires from the U.S. or the other member countries. Thus, it is left to the judgment of each member as to how detailed the information should be in order to comply with the standing request.

This lack of specificity in the terms of reference plus a growing desire for more data on the part of the U.S. government has led to increasingly detailed questionnaires in connection with U.S. direct investment abroad and some of the information called for in the questionnaire form proposed to the Working Group by the Commerce Department for the 1973 survey would be, in the view of most members of the Group, difficult to justify under the Bretton Woods authority.

Some members of the Group felt that the proposed questionnaire did not go substantially beyond the 1966 survey in this respect and that the latter should serve as a precedent and guide for this purpose. It was noted that there was no indication from the reporting community that they considered the 1966 survey in excess of what the Government could justifiably ask for. Most of the Group, however, felt that the 1966 precedent was not particularly meaningful. An important consideration here was the fact that the reporting burden on the business community has increased in recent years and in the next 6 months or so business firms will be undergoing a particularly heavy reporting burden.[1] In this kind of environment, concern was expressed that a questionnaire of the kind proposed by the Commerce Department might provoke a court challenge of the Government's authority under the Bretton Woods Act and that in such event the Government's case might be somewhat tenuous. Apart from the risk of a court challenge, it was noted that the Government has an obligation to police itself and assure that its desire for data does not exceed its actual authority.

[1] In addition to filing under the proposed survey of outward direct investment, most of these same firms will be filing special reports on: (a) their foreign currency holdings under the Proxmire Amendment to the Par Value Modification Act, (b) foreign holdings of U.S. securities under the Inouye-Culver legislation, and (c) line-of-business data to the F.T.C.

One possible solution to the problem would be for the U.S. Executive Director to the IMF to propose to the Fund Board that the Fund give more specific instructions on what data it requires. The Working Group recommends that the NAC consider this possibility.

The Working Group unanimously agreed that the ideal solution to the problem would be for the Government to have new legislative authority for the collection of all data relating to the balance of payments. There is a good deal of information on the operations of multinational companies which, while perhaps not necessary for the purposes of the IMF, is necessary to gain an understanding of the effects of these companies' operations on U.S. employment, income, exports, imports, tax revenue, etc., subjects which have become of increasing interest in recent years.

The new legislative authority would be similar in scope to the Inouye-Culver legislation in authorizing a detailed survey of foreign investment in the U.S. and would be on a continuing basis. The members of the Working Group agreed to pursue the question of the feasibility of requesting such legislation within their own agencies and in the appropriate inter-agency forum.

Most members of the Group, however, felt it would not be advisable to defer any survey of U.S. direct investment abroad in anticipation of obtaining such legislation, which would probably take at least a year to become effective, since it has already been seven years since the last survey was taken. Accordingly the Group reviewed the survey form proposed by the Commerce Department in the context of the foregoing considerations relating to the Bretton Woods authority and concluded that some of the questions should be deleted from the form. A copy of the form showing the deleted items is attached.

Attachment.

NAC WORKERS GROUP GOVERNMENT INVESTMENT SURVEY, ATTENDANCE AT MEETING OF AUG. 6, 1974

	Agency room No.	Telephone (government code)
Treasury:		
James A. Griffin, Chairman	5100	184–2386
Fred Cutler	5100	184–5143
Walther Lederer	5130	184–5681
Dirck Keyser	5130–D	184–8027
Gary G. Hufbauer	5121	184–8784
John Cambon	5400	184–5177
Josef E. Hébert (NAC)	5037	184–2940
Commerce:		
George R. Kruer	608 (Tower Bldg.)	139–30703
Ida May Mantel	616 (Tower Bldg.)	139–30646
John Bogumill	618 (Tower Bldg.)	139–30687
Federal Reserve:		
Guy Stevens	553 (Watergate 600)	147–3540
Sam Pizer	540	147–3780
OMB: David T. Hulett	10208–NEOB	103–4730
AID: J. de Melo	3889	101–21337

U.S. Department of Commerce,
Social and Economic Statistics Administration,
Bureau of Economic Analysis.
Washington, D.C., June 24, 1974.

To: Fred Springborn, Executive Secretary, National Advisory Council on International Monetary and Financial Policies.

From: George R. Kruer, Chief, International Investment Division.

Subject: Surveys of Business Investments Abroad and in the United States, 1973.

The Bureau of Economic Analysis, U.S. Department of Commerce, is preparing to conduct two surveys: (1) a survey of U.S. business investments abroad in 1973, and (2) a survey of foreign business investments in the U.S. in 1973. Data collected in these surveys will provide a benchmark reference base for the quarterly balance of payments series relating to direct investments. In addition, the data to be collected are necessary in order to analyze the impact of the operations of multinational companies on the balance of payments and the domestic economies of the United States and foreign countries.

This Bureau collects quarterly balance of payments data on a mandatory basis pursuant to a standing request to the U.S. Government from the International Monetary Fund (IMF) for balance of payments data. In order to maintain the accuracy of the sample surveys upon which the current balance of payments data are based, it is necessary to conduct periodic benchmark surveys. We are proposing that the filing of reports in these proposed benchmark surveys be made mandatory pursuant to Section 8 of the Bretton Woods Agreements Act (59 Stat., 22 U.S.C. 286f). In accordance with sections 2(b) and 2(c) of Executive Order 10033 of February 8, 1949 (14 F.R. 561), as amended, the NAC is to determine what information is to be furnished to the IMF, and the Director of the Office of Management and Budget (OMB) has the power to determine which agencies should collect information required by the IMF. The Department of Commerce is the federal executive agency which collects the required data on direct investments and the Secretary of Commerce has assigned this responsibility to the Bureau of Economic Analysis.

We are requesting NAC concurrence that these surveys are necessary in order to fulfill the U.S. Government's obligations to the IMF. If the NAC concurs, then the OMB, to which requests are being made for approval of the proposed report forms under the Federal Reports Act, can give approval to the Department to conduct the surveys on a mandatory basis.

A typed copy of the proposed report form, excluding the industry classification booklet, for the 1973 survey of U.S. business investments abroad is attached. The last such survey, covering 1966, was approved on June 6, 1967 by the NAC for collection on a mandatory basis. (See pages 64 and 65 of the NAC annual report for fiscal year 1967; NAC Staff Document No. 67–4, May 1, 1967; and NAC Action No. 67–171, June 6, 1967.)

The last survey of foreign business investments in the United States, covering 1959, was approved by the NAC for collection on a mandatory basis. (See pages 23 and 24 of the NAC semi-annual report for the period January to June 1960.) A copy of the proposed report form for the 1973 survey will be sent to OMB and to the NAC within the next month.

U.S. Department of Commerce—Bureau of Economic Analysis
Survey of U.S. Business Investments Abroad—1973

I. INTRODUCTION

A. Purpose

The Survey of U.S. Business Investments Abroad—1973 is being conducted by the Department of Commerce to obtain complete and accurate data on the amount of direct business investments at the end of 1973, the net increase in investments during the year, the return on these investments, and certain aspects of their operations which affect the U.S. and foreign economies. Direct investment, as distinct from portfolio investment, refers to investment which involves a significant influence in or a substantial element of control over the management of a foreign business enterprise. For the purposes of this survey, such influence or control is assumed to exist when the foreign business enterprise is owned by a U.S. person to the extent of 10 percent or more. The last such Survey was conducted for 1966.

The data collected in this Survey will be used in the formulation of Government policy and will serve as a base from which data collected in sample surveys can be expanded to reliable total estimates. These total estimates are used in the compilation and analysis of the United States balance of payments.

B. Legal Basis

The filing of reports for this Survey is mandatory under Section 8 of the Bretton Woods Agreement Act (59 Stat. 515, 22 U.S.C. 268f). In accordance with sections 2(b) and 2(c) of Executive Order 10033 of February 8, 1949 (14 F.R. 561), as amended, the Director of the Office of Management and Budget has designated the Department of Commerce as the federal executive agency to collect the required data, and the Secretary of Commerce has assigned this responsibility to the Bureau of Economic Analysis. This Survey has been approved by the Office of Management and Budget under the Federal Reports Act (Public Law No. 831, 77th Congress). All replies will be held in strictest confidence by the Bureau of Economic Analysis, Department of Com-

merce, under the provisions of section 4(b) of that Act and section 8(c) of the Bretton Woods Agreements Act. The information will be used exclusively for statistical purposes and published only in such aggregates which preclude the disclosure of data supplied by individual reporters. No reporter is required or requested to submit a rely to any specific question on these forms, if, by so doing, the security laws of a foreign country are violated.

II. GENERAL INSTRUCTIONS

A. Definitions

For the purposes of this Survey and any instructions or rulings issued hereunder, the following definitions are prescribed:

1. *Person* shall mean an individual, a corporation, a branch, a partnership, an associated group, a joint-stock company, a trust, an estate, or other unincorporated organization.

2. *Associated Group* shall mean two or more U.S. persons who, by the appearance of their actions, by agreement, or by an understanding, exercise their voting privileges in a concerted manner to influence the management of a foreign business enterprise. The following are deemed to be associated groups:

(a) Members of the same family.

(b) A corporation and one or more of its officers or directors.

(c) Members of a syndicate or joint venture.

(d) A corporation and its domestic subsidiaries.

3. *Business Enterprise* shall mean any organization, branch, or venture which exists for profit making purposes, and any real estate which is owned.

4. *Branch* shall include (a) the operations or activities conducted by an incorporated or unincorporated person in its own name in a different location, but not through an incorporated entity, and (b) the foreign business of U.S. mutual insurance companies.

5. *Foreign Affiliate* shall mean a foreign business enterprise which is directly and/or indirectly owned by a U.S. person to the extent of 10 percent or more of its voting stock for an incorporated business enterprise or an equivalent interest for an unincorporated business enterprise.

6. *U.S. Reporter* shall mean the U.S. person required to file a report in this Survey.

7. *Parent* refers to (a) the U.S. Reporter holding a reportable direct ownership interest in a foreign affiliate; (b) the U.S. Reporter filing a Form B to report direct debt positions and transactions between himself and one of his indirectly owned foreign affiliates; and (c) the foreign affiliate of the U.S. Reporter which holds a direct ownership interest in another foreign affiliate of the U.S. Reporter.

8. *United States* shall refer to the 50 states of the United States; the District of Columbia; the Commonwealth of Puerto Rico; the Panama Canal Zone; the U.S. Virgin Islands; and all other territories and possessions of the United States.

9. *Foreign* shall mean that which is situated outside the United States; belonging to, characteristic of, or under the jurisdiction of a country or political entity other than the United States.

B. Who Must Report

1. *Basic Requirement*—A BE–10 report is required from every U.S. person having a foreign affiliate, that is, every U.S. person having direct and/or indirect ownership of at least 10 percent of the voting stock of an incorporated foreign business enterprise, or an equivalent interest in an unincorporated foreign business enterprise, at any time during the year ending December 31, 1973.

Reports are required even though the foreign business enterprise may have been established, liquidated, sold, destroyed, or expropriated during the reporting period.

2. *Other Requirements.*—(a) Persons with beneficial interests: A U.S. person who owns a beneficial interest in a foreign affiliate shall report, whether or not he is the owner of record, except as specifically provided below for estates and trusts.

(b) Estates and trusts: The report filed for an estate or trust should be filed by the fiduciary and not by the beneficiary. Estates or trusts established

under the laws of the United States are subject to the requirements of this Survey.

Estates or trusts actually created in the United States must report even though the trust instrument provides that the trust shall be subject to the laws of a foreign country.

(c) Business enterprise in the United States owned by a foreign person: A business enterprise in the United States owned by a foreign person shall report with respect to any foreign business enterprise it owns directly and/or indirectly, to the extent of 10 percent or more, but shall not report other property of its foreign owner.

C. Exemptions and Exclusions

1. *Type of property.*—Property held exclusively for personal use, and not for profit-making purposes, is exempt for purposes of this Survey. For example, hunting lodges, homes, and automobiles for personal use are exempt.

2. *Status of person.*—A report need not be filed by persons who are (1) citizens of the United States who permanently reside in a foreign country, or (2) U.S. residents who are officers or employees of foreign governments or international (quasi-governmental) organizations and members of the immediate families of such individuals, provided they are not citizens of the United States.

3. *Foreign nonprofit organizations.*—Foreign religious bodies, charitable organizations, and other nonprofit organizations are not business enterprises and therefore an ownership interest in these types of organizations by U.S. persons is not reportable.

4. *Partial exemption, Form A.*—U.S. Reporters who are religious, charitable, or other nonprofit organizations or who are individuals are required to file a BE–10 report, but are exempt from filing the financial data section of Form A.

5. *Total filing exemption, Form B.*—If the foreign affiliate's total assets and net sales or gross operating revenues excluding sales taxes (items 73 and 74 of Form B) are *each* less than $250,000 (two hundred and fifty thousand dollars) no Form B need be filed for the foreign affiliate. Value is to be determined based on the books of the foreign affiliate translated into U.S. dollars. However, if a foreign affiliate owns another foreign affiliate for which a Form B must be filed, then a Form B must also be filed for the foreign parent regardless of the value of the foreign parent's assets or income. That is, all affiliates upward in a chain of ownership must be reported.

6. *Partial reporting exemption, Form B.*—If, for a given foreign affiliate, the following four items are *each* less than $3,000,000 (three million dollars), then the U.S. Reporter is exempt from completing Part IV, Financial Schedules for the affiliate: (i) Total assets; (ii) net sales or gross operating revenues excluding sales taxes; (iii) U.S. merchandise exports shipped to the affiliate; and (iv) U.S. merchandise imports from the affiliate.

These four items are to be reported for each affiliate in Part III, Selected Financial Data of the Foreign Affiliate, items 73, 74, 75, and 76, respectively. Value is to be determined based on the books of the foreign affiliate translated into U.S. dollars. However, if a foreign affiliate owns another foreign affiliate for which a complete Form B must be filed, then a complete Form B must also be filed for the foreign parent regardless of the value of the foreign parent's assets, income or U.S. trade. That is, all affiliates upward in a chain of ownership from an affiliate for which a complete report must be filed, must file a complete report.

D. Coverage and Number of Completed Forms Required

1. *Form A.*—A Form A should be filed by the U.S. Reporter covering the fully consolidated U.S. domestic enterprise. Form A should be filed by the U.S. person which is not owned, to the extent of more than 50 percent of its voting rights, by any other U.S. person. (Exception: When a U.S. business enterprise is owned more than 50 percent by an individual, the report should be filed by the business enterprise rather than the owning individual.) For corporate reporters, the fully consolidated domestic enterprise is defined to include the domestic operations of every corporation which is resident in the United States and is owned to the extent of more than 50 percent of its voting stock by the reporting U.S. corporation and its majority-owned U.S. corporations. Consolidate every Domestic International Sales Corporation which is owned to the

extent of more than 50 percent of its voting stock. Do not consolidate data for foreign affiliates on Form A.

2. *Form B.*—A U.S. person is required to file at least one Form B for each foreign affiliate, i.e., for each foreign business enterprise in which the U.S. person owns directly and/or indirectly at least 10 percent of the voting stock or an equivalent ownership interest. (To determine a U.S. person's percentage of indirect voting ownership in a goven foreign business enterprise, multiply first foreign business enterprise in the ownership chain by the succeeding direct the initial direct voting ownership percentage held by the U.S. person in the voting ownership percentages held by each intermediary foreign business enterprise in the ownership chain between the U.S. person and the given foreign business enterprise.) All direct and indirect chains of ownership interests held by a U.S. person in the given foreign business enterprise are summed to determine whether the enterprise is a foreign affiliate of the U.S. person for purposes of reporting on Form B.

In cases where the record keeping system of the foreign affiliates makes it impossible or extremely difficult to file a separate report for each foreign affiliate, the U.S. Reporter should call this office (202–523-0632) for guidance. Under these conditions, the U.S. Reporter may be given permission to file a consolidated report for two or more affiliates, but only for those affiliates which are in the same country and which are classified in the same industry. Under no circumstances may a U.S. Reporter consolidate foreign affiliates in different countries or in different industries. (See the "Industry Classifications' portion of the *Industrial Classifications and Export and Import Trade Classifications* booklet to determine whether the affiliates have the same industrial classification.)

U.S. Reporters who participate in other BEA direct investment surveys must consolidate in the same manner for all foreign affiliate forms subsequently filed with the Bureau of Economic Analysis, such as Forms BE–133, BE–577 and BE–578. In cases where current consolidation practices on these forms do not conform to the above instructions, the U.S. Reporter is requested to change the consolidation practices on Forms BE–133, BE–577 and BE–578. When a form based upon the amended consolidation practice is submitted, please bring it to this Bureau's attention when filing the form.

If two or more U.S. Reporters jointly own a foreign affiliate, directly or indirectly, each U.S. Reporter must submit a Form B for the affiliate. Only one of these forms must have Part III, Selected Financial Data of the Foreign Affiliate and Part IV, Financial Schedules, completed. The Form B of the U.S. Reporter having the highest percentage of ownership in the foreign affiliate should contain the complete data. Where the percentage is the same, the U.S. Reporters must agree among themselves as to who will submit Parts III and IV. If Parts III and IV are not submitted on a particular form, please indicate in item 14 of the Identification Section which U.S. Reporter is filing the data.

Multiple Form B's are required to be filed by the U.S. Reporter for a single foreign affiliate to separately report:

(a) For each direct line of ownership in a foreign affiliate which is held by the U.S. Reporter or a foreign affiliate of the U.S. Reporter; and

(b) For direct financial positions or transactions with the U.S. Reporter when the foreign affiliate is indirectly owned by the U.S. Reporter.

* * * * * * *

Solid lines indicate ownership; dotted lines indicate financial transactions. In this situation, the following Form B's are required:

(a) One Form each for Affiliates A and B to show direct ownership lines 1 and 3 by the U.S. Reporter.

(b) Three Forms of Affiliate C, one to show direct ownership line 5 by Affiliate A, one to show direct ownership line 6 by Affiliate B, and one to show the direct financial transaction line 2 with the U.S. Reporter. (In the last case, the U.S. Reporter is considered to be a "Parent" for the purpose of completing that Form B even though he has no direct ownership interest in Affiliate C.)

(c) Two Forms for Affiliate D, one to show direct ownership line 4 by the U.S. Reporter, and one to show direct ownership line 7 by Affiliate B.

(d) One Form for Affiliate E to show direct ownership line 8 by Affiliate D.

A separate Form is not required for financial transaction line 9 because this is a financial transaction between foreign affiliates having no direct ownership relation to each other.

A separate Form is not required for (reverse) ownership line 10; the data for this investment would be reflected on the Form for ownership line 5.

If multiple form are required from one U.S. Reporter for one foreign affiliate, only one of these forms should be completed in full, including Part III, Selected Financial Data of the Foreign Affiliate and Part IV, Financial Schedules. For the remaining forms, only Parts I and II need be completed. The form completed in full should be the one which shows the highest percentage of direct ownership interest. In item 14 of the Identification Section of the additional forms, please indicate which form includes the complete data.

E. Miscellaneous

1. *Accounting records to be used.*—In supplying the information required in this Survey, data for corporations should be derived from the type of records used to generate reports to stockholders. Reports for unincorporated persons should be derived from equivalent records.

2. *Reporting period.*—If at all possible, reports should be submitted on a calendar year basis for the year ending December 31, 1973. If this necessitates the estimation of annual data based upon quarterly or monthly reports in order to present the data on a calendar year basis, or closer to a calendar year basis, such estimates are acceptable.

3. *Annual stockholder's report.*—U.S. Reporters are requested to submit, along with their BE–10 report, a copy of their annual report to stockholders.

4. *Required information not available.*—All reasonable efforts should be made to obtain information required for reporting. Every question on each form should be answered except where U.S. Reporters are specifically exempt from reporting certain Parts or items on the forms. When properties have been expropriated or seized, the latest available information should be used. Where only partial information is available, an appropriate indication should be given.

5. *Estimates.*—If actual figures are not available supply estimates. When data items requiring detailed breakdowns cannot be fully sub-divided, supply totals and an estimated percentage breakdown.

6. *"Specify".*—Certain data lines require that U.S. Reporters "specify" items included in the total for such lines. In all such cases, the U.S. Reporter should give the type and dollar amount of the items included in the line.

7. *Space on form insufficient.*—When space does not permit a full answer to any question on the form, the information required should be submitted on supplementary sheets appropriately labeled and referenced to the question and the form's serial number.

8. *Filing date.*—Reports shall be filed within 60 days after publication of the reporting requirements in the Federal Register.

9. *Assistance.*—If there are any questions concerning the report, phone (202) 523-0623.

10. *Number of copies.*—A single original copy shall be filed with this Bureau. In addition, each U.S. Reporter should retain a copy of his report.

11. *Where to send reports.*—Mail all reports to International Investment Division BE–50 (SSB), Bureau of Economic Analysis, 1401 K Street, N.W. (Tower Building), U.S. Department of Commerce, Washington, D.C. 20230.

III. INSTRUCTIONS RELATING TO SPECIFIC PARTS OF THE FORM

A. U.S. Merchandise Export and Import Data

1. *Concepts and definitions.*—(a) The phrase "Products of * * *" refers to merchandise which has been produced (i.e. grown, extracted, processed, assembled, or manufactured) by the entity named, or which has been changed by the entity named in some manner which results in an increase in the value of the merchandise. Merchandise which is shipped in essentially the same condition as when purchased is not considered a product of the entity shipping the merchandise. For example, if the U.S. Reporter assembles widgets from parts purchased from others and ships the finished widgets to his foreign affiliate, the value of widgets exported should be included in the column labeled "Products of U.S. Reporter(s) of this affiliate." If, however, the U.S.

Reporter purchases the parts in the United States and ships the parts to his foreign affiliate for manufacture into widgets, the export value of the parts should be considered "Products of others."

(b) The phrase "merchandise exports" or "merchandise imports" refers to the physical movement of merchandise between the customs area of one country and the customs area of another country.

(c) Shipments "by" an entity are physical movements of merchandise by that entity, whether or not the merchandise was charged to others by that entity. For example, if the U.S. Reporter charged merchandise to his foreign affiliate, but the merchandise was shipped by another U.S. person, the merchandise is considered "shipped to this affiliate by other U.S. persons." Also in cases where the merchandise is shipped by someone other than the U.S. Reporter, even though the U.S. Reporter assists in placing the order, the merchandise is considered merchandise shipped by others. (Note: Merchandise shipped by an independent carrier or a freight forwarder at the expense of an entity are classified as shipments "by" that entity.)

(d) Shipments "to" an entity are physical movements of merchandise to that entity, regardless of who was actually charged for the merchandise or who ultimately received title to it. For example, if the U.S. Reporter charges $100 worth of widgets to his Swiss affiliate but actually ships the widgets to his affiliate in France, the trade entry should be on the Form B of the French affiliate only.

2. *Valuation.*—(a) Exports: U.S. merchandise exports should be valued f.a.s. at the U.S. port of exportation. This includes all costs incurred up to the point of loading the goods aboard the export carrier at the U.S. port of exportation, including the selling price at the interior point of shipment (or cost if not sold), packaging costs, inland freight, and insurance. The cost of loading and all subsequent costs are excluded.

(b) Imports: U.S. merchandise imports should be valued at the actual purchase-sale contract price agreed upon between the buyer and the seller, adjusted to a f.o.b. foreign-port-of-exportation basis. This excludes U.S. import duties, freight, and insurance from the foreign country to the U.S. port of entry.

B. Employment and Employee Compensation Data

In addition to employment and employee compensation relating to current operations, employment and employee compensation data in this section are to be reported inclusive to those employees, and their associated compensation costs, who are engaged in an activity, the value of which is capitalized.

1. *Employment.*—Total employment: Enter the equivalent to the average number of full-time employees for the year. Part-time employees should be included at the appropriate percentage of a full-time employee according to the proportion of total time worked. Seasonal employees or employees hired or employees hired or released during the year should also be included at the appropriate percentage.

Total employment is then sub-divided into the following classifications:

(a) Production workers: Production workers are those employees who are most directly connected with the actual carrying out of the activity of the business being reported, up to and including working foremen, but excluding other supervisory employees. For mining, manufacturing, and farming they would be those involved in the physical production or handling of goods; in the trade and services industries they are the nonsupervisory employees engaged in selling, distributing, or performing a service; and in the construction industry they are the working foremen, journeymen, mechanics apprentices, laborers, etc., whether at the construction site or in shops or yards.

(b) Non-production workers: refers to all employees who are not production workers. These are further divided into the four categories shown below.

1. *Managerial employees.*—are those employees who spend all or a majority of their time in management activities (excluding working foremen and managers of research and development work).

2. *Research and development scientists and engineers.*—are all persons engaged in scientific or engineering research and development work, including managers, at a level which requires a knowledge of physical or life sciences or engineering or mathematics equivalent at least to that acquired through completion of a four-year college course with a major in these fields, regard-

less of whether or not they actually held a college degree in the field (i.e., training may be either formal or by experience).

Research and development includes basic and applied research in the sciences and in engineering, and design and development of prototypes and processes, if the purpose of such activity is to do one or more of the following things:

1. Pursue a planned search for new knowledge whether or not the search has reference to a specific application.

2. Apply existing knowledge to problems involved in the creation of a new product or process, including work required to evaluate possible uses.

3. Apply existing knowledge to problems involved in the improvement of a present product or process.

Research and development includes the activities described above whether assigned to separate research and development organizational units of the company or carried on by company laboratories and technical groups not part of a separate research and development organization.

3. *Other professional and technical employees.*—includes all professional employees, and technical employees above the working supervisory level, not classified as "managerial employees" or "research and development scientists and engineers." This category should include, for example, scientists, engineers, accountants, lawyers, doctors, economists and other professionals not primarily engaged in line management or research and development.

4. *Other non-production workers.*—all workers not included in the preceding three categories.

2. *Employee Compensation.*—(a) *Employee compensation*: includes all payments to and all other costs incurred on behalf of, or for the benefit of, all employees. Include cash payments, payments in kind, the cost of payment and non-payment type fringe benefits, and the cost of employee benefit plans, both those that are legally required and those that are voluntary.

(b) *Wages and salaries*: refers to gross earnings of all employees before deduction for employees' contributions to social insurance, withholding taxes, group insurance premiums, union dues, etc. Include payment type fringe benefits such as paid bonuses, dismissal pay, vacation and sick-leave pay, and commissions; and the cash equivalent of wages and salaries paid in kind. Exclude commissions paid to independent sales personnel who are not employees of the affiliate being reported. For incorporated affiliates, include salaries of officers; for unincorporated affiliates, exclude payments to proprietors or partners.

Payments in kind of wages and salaries should cover the actual cost to the employer of goods and services furnished to the employee free of charge, or at a markedly reduced cost, which are clearly and primarily of benefit to the employees as consumers, such as free housing and free food. Do not include in wages and salaries outlays which benefit employers as well as employees such as expenditures on amenities at places of work, employee training programs, and reimbursements for business expenses.

(c) Cost of employee benefit plans including both those that are legally required and those that are voluntary. All payments for plans required under law to be paid by the employer are included, such as employer contributions to social insurance funds. Voluntary plans include all plans not specifically required by law, whether initiated by the employer or established as a result of a collective bargaining contract. Included are employer payments for such plans as group health and life insurance, private pension, supplemental unemployment compensation, deferred profit sharing, etc. If the plans are financed jointly by the employer, only the employer payments should be included.

(d) Other labor costs: refers to all other payments and costs incurred on behalf of, or for the benefit of, all employees which are not included in wages and salaries or in the cost of employee benefit plans. Include costs of vacation and recreational facilities, employee training programs, in-house medical facilities, parking lots, discounts on employees' purchases, operating losses on company-owned cafeterias, and similar costs.

Mr. CLAYMAN. First, the major deletions are in the area of employment and compensation: The number of employees—talking about multinational corporations, Mr. Chairman—production workers, managerial and research and development employees with aggregate payroll costs for both domestic parents and foreign affiliates.

This has been cut out. Somehow I suppose this is considered, I say this facetiously, subversive. Trade, references to trade, cut out, and the value of the products imported to the U.S. parent from foreign affiliates.

How can Congress make rational judgments on trade policy and what needs to be done with the multinational corporations, American multinational corporations, if they are not aware of the value of the imports to U.S. parents from foreign affiliates.

We have a continuing argument with multinational corporations as to what this figure means. The products in the trade area exported from the U.S. parent to its foreign affiliates and the affiliates local sales and their exports to third countries, all cut out.

In the area of research and development, NAC eliminated research and development expenditures, domestic and foreign including federally funded R.&D. projects by the multinational parents.

For example, we think it is relevant to know how much American multinational corporations are spending abroad in research and development and how much they are spending domestically.

If, for example, they are spending an inordinate sum of money abroad and relatively little at home, what does this portend for the future of the American economy? A terribly important and vital and simple fact that Congress needs to know, Government needs to know, and the people need to know.

For example, they eliminated new capital investment in domestic plant and equipment, necessary to compare the firm's level of capital investment at home and abroad.

One of the great arguments now goes on and I think in your opening statement you made reference to it as we consider the whole tax problem.

What kind of relief, if any, new relief, do American corporations need, multinational and domestic?

If, for example, as we allege and I think rather well known and maybe the figure is too conservative, what was it in 1973? Was it $21 billion or thereabouts that American multinationals exported abroad; $21 billion. Having done this the same corporations are coming to Congress and to the American people and to the White House, urging that they need a new kind of tax relief because they don't have the money to spend in American domestic development. We need to know these facts and our Government doesn't know. Here they are, Government striking this from the list of questions.

How can Congress make this determination? It will be making it in a dark room, and blindfolded in addition, because it won't know the true facts.

Exploration and development expenditures for petroleum and mining operations, including depletion allowances, both parents and affiliates, domestic and foreign; these are stricken, too.

How can we make determinations about energy policy if we don't know these fundamental facts? What kind of exploration is being made? What kind of development expenditures? How much of it is being put abroad? How much in this country? If most of it, as I suspect, is going abroad and too little here, how do we catch up to what we all call the energy crisis? Is the only way to do it to make

the cost of energy so high that in the process people can't and won't buy it? Is this the answer?

Senator METCALF. The people have to buy energy, though.

Mr. CLAYMAN. I know they do.

Senator METCALF. It is the most necessary thing in running a home today, electricity. So the utilities have the last word. You go without almost anything but food in order to pay for the increased cost of energy.

Mr. CLAYMAN. You see, you emphasize so succinctly the point I am elaborately trying to make, but without the information of what is happening, both in terms of American multinationals abroad and at home in the energy field in terms of exploration and development, how can we make rational decisions?

So what happens is that we are reduced to making totally political decisions and political decisions more often than not are not valid decisions.

Finally, in terms of the items that are eliminated but are the most important items—income statements and tax data for U.S. parents, net sales or revenues, the Federal and State income taxes, the sales tax and Government royalties paid, all of these that go to the heart of any kind of a questionnaire—I don't know that it goes to the heart, they are so limited, really, even these are so limited that they may not get to the heart.

They may get to the intestines or some place in the proximity of the heart, but not really to the core, but notwithstanding, I shouldn't look a gift horse in the face.

They represent such an enormous advance that I should continue to shout hurrah, if they become the fact in government circles which they are not now.

So that is a long answer to your pertinent question, sir.

Senator METCALF. Mr. Clayman, the questionnaire that seemed to be so important and significant to determine and ascertain the information that we need had to go through the NAC, but did it have to go through OMB, too, as a part of the reports?

Mr. CLAYMAN. It is my understanding that after it goes to the NAC it goes to OMB. That is a third step. It goes through a very elaborative sieve.

Senator METCALF. That is what Mr. Reinemer calls double jeopardy.

Mr. CLAYMAN. In this case, triple. There are three levels.

Senator METCALF. The questionnaire has a pretty difficult route to overcome all of these obstacles that are placed in its way so that we can get the information.

Mr. Clayman, I think one of the things that I gathered from your statement that has presented a new outlook is we are concerned here in the Congress and in the Government about the balance of payments and we try to have our exports balance our imports, and so forth, but we are not concerned about jobs. This export of jobs that you talk about is something that certainly we should have complete and authoritative information on.

I really am not so worried about the balance of payments, Mr. Clayman, as I am worried about jobs for American citizens. I think

that probably that is the most important. I should have thought of that a long time ago. I probably should have talked to you about it a long time ago.

Mr. Clayman. From our point of view, I will state the obvious. I have said this before; I will say it again, that without the job base, America can't exist.

Senator Metcalf. We don't even know what we are doing.

Mr. Clayman. No country can. We are riding a rudderless ship in this area. The main thing is, you will forgive me for kicking this around still more, the amazing thing is that the issue that you raise in your hearings broadened beyond just the agencies is about as important for decisionmaking of Congress itself as any that I can think of, even though it sounds like arithmetic, mathematics—academic—and yet I am fearful that Congress doesn't comprehend this.

I want to compliment you, sir, for having this kind of perception because you won't get headlines on this. Yet, there aren't very many more important activities that any committee is being involved in. Forgive me for putting it on this personal basis.

Senator Metcalf. If we had the information which you are talking about, especially from the multinational corporations, what do you think we could do with it to increase and improve employment opportunities?

Mr. Clayman. You see, the information that we seek applies to the entire operation of multinationals, international and domestic. We see the American multinational, the world multinational as probably one of the most significant forces in modern economy.

When you consider that it has grown to a Goliath really in the course of about 12 or 15 years at the most, 5½ million, we say, jobs abroad, a loss of at least 1 million we say from 1966 to 1972. If this goes along unabated, then it is going to change our entire society.

If this analysis, this very, very broad analysis, is solid, then obtaining information that substantiates what I am trying to say is imperative to the U.S. Congress for its future action.

We feel that American multinationals need to be abated: else they will consume our economy; else we will create a world force that will not be for peace. I am generalizing now, but if you see it in this perspective, the debate now is whether U.S. multinationals are the third or the fourth productive force abroad in the world. Is it the U.S., Russia and Japan? Or is it Japan and Russia? Then is it U.S., Japan or Russia second? Or is it American multinationals abroad third? Or are they fourth?

That is not a happy choice, whether it is third or fourth. If this continues unabated, then we see this as supplementing a major part of the American work force.

Then I think you ought to know more directly, Congress ought to know more directly, and if it knows more directly, perhaps it will address itself with certitude. What is the tax set up? Are we encouraging multinationals as we believe they are being encouraged by a special kind of tax subsidy. Are they that important? Should the flight abroad be encouraged?

If so, what does this do to our tax system and all the rest? This is very much of a generalization, but it indicates the depth of our concern.

Senator METCALF. I must apologize to you, Mr. Clayman. I thought that perhaps you have been talking about this knowledgeably for quite a while, but I think this concept of the jobs we are exporting to get a balance of payments in dollars is a pretty-expensive way for us to balance or to have a trade balance.

We should think about things other than dollars against dollars and we should talk about jobs in America as against jobs that we are sending abroad.

That is the most significant thing you have told me today. I knew some of these other things.

Mr. CLAYMAN. In fairness, let me make an observation, a quick observation. The multinationals deny this vehemently. Each one of them has spent hundreds of thousands of dollars on individual so-called studies of their own. They deny this.

We think they are utterly wrong. Indeed, we suspect that there is a great deal of misrepresentation, but the important thing is somebody has to find out the truth because if your allegations are correct, we are in dire trouble and the only place is Congress, Government.

Senator METCALF. If they deny it and their denial is based upon facts that they can demonstrate, then there is no reason why we shouldn't have this information about employment, and so forth, that we have had in these questionnaires.

If your allegations are true, then we should know about it. Information is the only thing we are after in this agency. If the information we give is incomplete or indequate or deliberately false or deliberately concealed, then our actions are not based upon sound judgment.

I have other questions. We have witnesses and I was late. I would hope that both you and your staff and my staff will continue this dialog for a time because you have opened up some areas that I want to continue to explore.

Mr. CLAYMAN. Thank you, Mr. Chairman; we appreciate your interest.

Senator METCALF. Thank you so much.

Counsel?

Mr. RYTER. What is your background before you became Secretary-Treasurer, were you a researcher?

Mr. CLAYMAN. For all my trade union career, I have been trying to live down the fact that once upon a time I was a lawyer.

Senator METCALF. I have been trying to live down that once upon a time I got a degree in economics.

Mr. CLAYMAN. So I confess now that once upon a time I was a lawyer and became involved with the labor unions and later in administrative functions within the labor movement.

Mr. RYTER. Are you aware of the research programs that go on at the Department of Labor?

Mr. CLAYMAN. The what?

Mr. RYTER. Research programs funded through the Department of Labor?

Mr. CLAYMAN. No; I am not aware of those in detail, but I suspect my associates are. If they see fit to answer, please do.

Mr. RYTER. If I could direct just a few questions, I wonder if your

department is aware of the fact that a substantial amount of money is about to be forfeited in the Department of Labor in the research area just because of some of intransigence of the bureaucrats and the laziness of the department? Are you aware of that?

Mr. Clayman. I am not aware of it, but I suggest that specific case that I gave you indicates that whatever they spend can't be terribly fruitful if they are not prepared to ask the rational, reasonable questions that the bureaucrats have recommended. And I can't come to any other conclusion than that the leadership of those departments that are involved in NAC, perhaps even the White House. I don't know this, simply don't want these facts asked for.

Mr. Ryter. Is either one of the gentlemen at the table familiar with the treaty by which we have authorization to collect information on the balance of payments? The Bretton-Woods Agreement?

Is either one of your counsel familiar with the Bretton-Woods Agreement and the limitations of the collection of data?

Mr. Prosten. Let me take a crack at it. We don't see Bretton-Woods as a limiting factor. There are certain things set out in Bretton-Woods that are required—neither of us, by the way, enjoys the status of being lawyers.

We can't hide that or claim it, but in looking through Bretton-Woods we see nothing that specifically limits the types of data that are being collected. There are certain minimums that are set out for the parties who are signatories to the agreement that they must produce in order to maintain the agreement.

We see nothing that sets a top line. We see a bottom line, but not a top one.

Mr. Ryter. Can I ask, additionally, did you mean to suggest in your testimony that the data that was collected previously in the 1966 survey was in excess of what was agreed upon as a basic minimum in this more recent 1973 proposed survey?

Mr. Prosten. What we suggested in our testimony was that there was more collected in 1966 than NAC was willing to allow last year. Both 1966 and last year were subsequent to the Bretton-Woods Agreement.

Mr. Ryter. Couldn't we ask that you put it in a further memo, noting which was allowed in 1966, and which was not allowed in the NAC proposal?

Mr. Brian Turner. I have already got that drawn up.

Mr. Ryter. I spent a great deal of time in the bureaucracy and found it a little bit confusing that a national advisory committee would act as an interagency function.

Could you clarify that? You say in your testimony that there is a Cabinet level interagency committee, advisory committee, acting in an administrative or bureaucratic function.

I was never aware that a Cabinet level committee, as one of the abilities, and it wasn't an administrative ability, could function in this capacity. Are you firm in your belief that this is a Cabinet level committee that acted to cut this out?

Mr. Brian Turner. I was in discussions with James Griffin, chairman of the working committee of NAC that dealt with this matter back in October and November. The description Cabinet level, inter-

agency committee, was his. I believe he was certainly in a position to know.

Senator METCALF. If you would yield, let's have the names and official designation of the members of the committee inserted in the record immediately at this point.

[The information subsequently received follows:]

U.S. DEPARTMENT OF COMMERCE,
THE ASSISTANT SECRETARY FOR ECONOMIC AFFAIRS,
Washington, D.C., August 12, 1975.

Hon. LEE METCALF,
U.S. Senate, Washington, D.C.

DEAR SENATOR METCALF: Pursuant to your request of August 6, 1975, I am submitting two lists of names for inclusion in your hearing record.

The first list comprises the members of the National Advisory Council on International Monetary and Financial Policies. Please note that Secretary Morton was not Secretary of Commerce at the time the working group's deliberations took place. Frederick B. Dent was the Secretary of Commerce at that time.

The list of NAC members is a follows:

Frederick B. Dent, Secretary, Department of Commerce;
Henry A. Kissinger, Secretary, Department of State;
William E. Simon, Secretary, Department of the Treasury;
Arthur F. Burns, Chairman, Federal Reserve Board;
William J. Casey, President and Chairman, Export-Import Bank.

The following is a listing of the members of the "working group":

Treasury Department: James A. Griffin, Chairman; Fred Cutler; Walther Lederer; Dirck Keyser; Gary C. Hufbauer; John Cambon; Josef E. Herbert (NAC); Dennis O'Connell.

Commerce Department: George R. Kruer; Ida Mae Mantel; John Bogumill; and Milton Berger.

Federal Reserve Board: Guy Stevens; Sam Pizer.

Office of Management and Budget: David T. Hulett.

Agency for International Development: Norman Mosher; J. de Melo.

Export-Import Bank: Steven B. Kahn.

Council of Economic Advisers: Laura Peterson.

Council on International Economic Policy: Sheliaghmichael Hewitt.

Sincerely,

JAMES L. PATE,
Assistant Secretary for Economic Affairs.

Mr. RYTER. I believe what you will find out is what you have citation to is an ad hoc interagency committee which may not have Cabinet level status and which really is not an advisory committee as much as it is an interagency discussion committee for the purpose of assuring that there is legislative authority to utilize this type of questionnaire or to ask specific questions of this type.

Following on that, let me ask the question whether or not you are suggesting that there is a Government policy of some sort to limit the amount of multinational information collected.

One of the good things about your testimony, the thing that I really have to admire and speak out on, is that 99 percent of your testimony was directed toward establishing the need for this information by pointing out the great deal of uncertainty in analyzing the effects of multinationals.

We just don't know the ground we are on. I think that far and away, you have established beyond a reasonable doubt there is a need, a crying need for additional information of this sort.

Is it your feeling that there is a coverup of some sort?

Mr. CLAYMAN. I wouldn't use the word coverup. I don't know

motivations. I have to believe, rationally, that when a committee composed of top representatives of the various departments of Government turn down, in my judgment willy-nilly important, imperative questions to be asked of the American multinationals, shall I call it an error of judgment? Shall I call it something else?

Mr. Ryter. Let's make two different assumptions first. If it is determined that this was an act of bureaucrats, for instance, an act of GS–18s teams or whatever you want to call them, as opposed to an act of schedule C's, would you distinguish in your own mind difference in policy?

Mr. Clayman. Of course there might be differences. I am assuming, and you have had more experience apparently in governmental agencies and departments than have I. I am assuming that the top of the leadership certainly would be aware of actions of this nature and if they are not. I suspect they are somewhat derelict in their duties. I would think that these questions are relatively sensitive questions to governmental agencies because I don't think they consider these in the abstract or academically. They are there. They know what they mean.

I am assuming that the secretaries of those various departments are aware of that action. I would not consider this as a small activity in any of these departments because if you, as you sure do, know the power of multinational corporations and their effective lobbying apparatus. I am sure that the decisions were made knowingly. I am not saying maliciously.

Mr. Ryter. Are you suggesting that in a sense there was contact between the multinationals and this interagency task force?

Mr. Clayman. I am sorry.

Mr. Ryter. Are you suggesting there is some sort of contact between the multinationals or representatives of the different multinational firms? One of the things that the minority——

Senator Metcalf. Let him answer.

Mr. Clayman. No; if you are asking me to allege that there is a deep conspiracy, another Watergate, I am not prepared to do it. I don't even know the principals involved personally. My associates know some of them; I don't.

I am just prepared to say that this is more than passing strange. If an issue of this importance escapes the scrutiny of the top leadership of each of those departments and if it did, then I say it is also commentary on the kind of direction those departments are getting.

Mr. Ryter. I think that is probably more relevant.

What is the current status? Is it your understanding that there has been further movement on this in the Department of Commerce?

Mr. Clayman. I am afraid you will have to repeat it. I am getting a muted sound from you.

Mr. Ryter. Is it your understanding that there has been any, or do you have an understanding as to whether or not there has been any further action on the part of the Department of Commerce to either renew, revive the questions or the authority under which they are seeking the survey?

Mr. Clayman. I am told by my associates that the BEA declined to carry out the study after these important questions were elim-

inated because it wasn't worth the expenditure that it required. The information they would receive would be relatively worthless.

Mr. Ryter. The information coming to me this morning indicates that the department may have individuals within the BEA who may have requested the Secretary for additional legislative authority to pursue this matter in statistical form.

In that case, that would indicate—just for the record, and I think we can try to have that verified.

One final question: Have the industrial unions of the department taken a stance against multinational investments?

Mr. Clayman. You don't know what you are asking for. You are asking for a speech.

I will make it quick, but it can't be perfunctory. We have not been against multinationals, per se, across the board. We have been for rationalism of their operation. We have always had some small, for many, many years, some small multinational operations abroad.

In its present form, it has gone wild. It is the expression that I heard the other day, the rogue elephant in the last 12–15 years. It is this unrationalized, uncontrolled pell-mell rush abroad which worries us intensely.

For the foreseeable future, I think the American labor movement will be heard often and loud on this issue.

Mr. Ryter. I think they should be and I think as the chairman pointed out in your testimony that the creation of the jobs in America today. I think it is one thing we can certainly join together on.

Thank you very much.

Senator Metcalf. Mr. Clayman, thank you for a most interesting, educational testimony and, of course, your testimony is up to the usual high level. You have probably inspired the committee to go into other areas.

I am going to ask that your staff work with Mr. Reinemer and have a little introductory statement of just what the industrial union department does and how it was created, and the background of the witness.

[The information referred to and subsequently supplied follows:]

Functions of the Industrial Union Department, AFL-CIO

The Industrial Union Department serves the AFL-CIO unions with membership in the industrial sector of the American economy. Founded at the merger of the former AFL and CIO, its affiliates now comprise 59 international unions representing over six million workers. The department provides diversified services to its affiliated unions in such fields as organizing, collective bargaining, legislation, research, and occupational safety and health. Its officers are President I. W. Abel, who is also president of the United Steelworkers of America, and Secretary-Treasurer Jocob Clayman.

Jacob Clayman, Secretary-Treasurer, Industrial Union Department

Jacob Clayman was born in Boston, Massachusetts. After spending his boyhood in Boston he moved to Niles, Ohio. He attended the Niles public schools and graduated from the town's high school in 1923.

He went to Oberlin College in Ohio and graduated in 1927. Following graduation from Oberlin he attended the University of Michigan Law School, taking his law degree in 1930.

After being admitted to the Michigan Bar, Mr. Clayman practiced law in Detroit. He then obtained employment with the federal government, later leaving to become a member of the Ohio Bar and to practice in that state.

Both his interests and his law practice brought him into contact with the labor movement, especially the new industrial trade unions in Ohio. In 1941 he was elected Representative from Trumbull County to the Ohio Legislature. In 1943 he became general counsel to the Ohio State CIO.

Mr. Clayman was elected full-time secretary-treasurer of the Ohio State CIO in 1948 and served in that post until the year of the AFL-CIO merger in 1955. In that year he was named special assistant to the president of the Amalgamated Clothing Workers in New York.

In 1958 he returned to Ohio where he took an active part in labor's successful fight against a proposed "right-to-work" law. He then served the Ohio State AFL-CIO as legislative representative before the State Legislature and was associated in law practice with his brother, David, in Columbus, Ohio.

Early in 1960, Mr. Clayman was designated as the administrative director of the Industrial Union Department, AFL-CIO. This department is the center of the industrial unions within the AFL-CIO and counts its affiliation at approximately 7 million members. He was a member of the Federal Advisory Council on Employment Security; he was a trustee of the United Community Funds and Councils of America, Inc., and was the founding president and is now a vice president of Consumer Federation of America. He was also chairman of the National Civil Liberties Clearing House, and a member of the Board of the Leadership Conference on Civil Rights. He was elected secretary-treasurer of the Industrial Union Department, AFL-CIO in September 1973.

Mr. Clayman has written many articles and pamphlets on the subject of unemployment compensation, workmen's compensation and other kindred special legislation.

Mr. Clayman. My apologies to the witnesses who are to follow, Mr. Chairman. I have very poor terminal facilities and I have exemplified it again. Thank you.

Senator Metcalf. You don't have to apologize to anyone. Thank you very much for coming.

[The prepared statement of Mr. Clayman follows:]

Prepared Statement of Jacob Clayman, Secretary-Treasurer, Industrial Union Department, AFL–CIO

Mr. Chairman and members of the subcommittee, my name is Jacob Clayman. I am Secretary-Treasurer of the Industrial Union Department, AFL–CIO. The IUD is a Department of the AFL–CIO, with 59 affiliates that represent some six million working men and women. The bulk of our activity is in the pursuit of programs to enhance the jobs and working conditions of these union members, although we also attempt to further their interests as consumers, taxpayers and citizens.

As we understand it, the current hearings are to assess the sufficiency of data on which government regulatory decisions are based, and how the accuracy, adequacy and availability of this data might be improved. We appreciate this chance to appear before your Subcommittee and share with you our feelings on the inadequacies of information flowing from governmental agencies.

We realize that the federal regulatory system is currently under great attack. It would appear that the President of the United States is fashioning a campaign to emasculate much of the good that these agencies do accomplish. Clearly, there are some instances of over-regulation. But all too frequently, there is too little regulation.

Both of these situations flow from the fact that the Administration has stacked these agencies with people whose interests seem to lie more with the entities they are supposed to regulate than with the public they are supposed to protect.

We wish to call to your attention a variety of situations in which we feel the government's performance in the field of data gathering is totally inadequate. Since the executive departments have not seen fit to compile the sorts of data that we feel are needed, it seems appropriate to ask that the regulatory agencies try their hand at it.

Primarily we are concerned with the lack of hard data in regard to employment. We do not mean the sorts of aggregate data about how many people are working and how many people are collecting unemployment checks which the Department of Labor issues. Rather we need figures indicating how and why people have become unemployed; where work opportunities are diminishing or vanishing; what industries are suffering or are likely to suffer substantial noncyclical unemployment; and various offshoots of such approaches to recordkeeping.

It seems to us that economic data collection in this country is quite unresponsive to some of the very obvious and most pressing needs of our citizens. In many cases where important data is collected it is terribly out of date by the time it is put into the hands of those who need it to shape national policies.

If we review the economic issues that have achieved crisis status in this country over the last decade or so, we find that in an amazing number of cases, we were told that "nobody knows" the true seriousness of the problem or how to fashion solutions because there was not sufficient information.

Clearly, it would be unreasonable for us to expect the immediate availability of data concerning every aspect of every contingency that may occur in or to a country as vast and economically complex as ours. But we feel there are certain areas which cry out for attention. We don't really care which agency or department does the data collection, but we do care that it be collected, analyzed and quickly made available to Congress and the public.

The sorts of data with which we are most concerned—because they are so totally unavailable—are those that would give us a handle on problems—current and potential—that affect jobs and employment.

Our example of what we're talking about was quite noticeable during the fuel crisis. Despite the elaborate budgets of a host of agencies and departments that collect data, nobody could find out how many people were put out of work, or forced onto reduced workweeks, as a result of this situation. The closest that we had to an answer was based on what new applicants for unemployment insurance indicated on their applications as the reason they thought they were now unemployed. This approach was not only unscientific but unacceptable as a method of understanding the effects of then current economic developments. It was based on the potentially subjective perceptions of insurance applicants. Of course, the perceptions of those who were ineligible for unemployment insurance were not counted at all.

Parenthetically, it was equally disturbing that seemingly nobody,

in or out of government, could tell us how much petroleum was available—either on top of or beneath the ground.

Both the jobs question bothered us the most, for it reminds us of just how inadequate and anaemic our society's base of knowledge in this area really is. It reminded us that for many years the labor movement has been pleading for that kind of data—data that would enable planners and policymakers to more successfully factor the jobs and thus the welfare of working people into their actions and proposals.

The issue of jobs—job loss, job creation and the like—comes up again and again as this country becomes aware of the growing impact of multinational firms on our economy. For a number of years now we have felt that American jobs were being shipped abroad at an alarming rate.

The multinational enterprises and their friends insist that we are wrong—that, in fact, this process has created jobs in our economy. We still think we're right, but desipte intense interest in the subject on the part of many sectors there is no body of date that can be used to prove or disprove our allegations.

Collecting reliable information and subsequently pursuing meaningful economic analysis on foreign direct investment—both inward and outward—is essential to the economic well being of this country. The American people and the American Congress have a right to this information.

Overseas production by the controlled foreign affiliates of U.S. multinational firms is now 3½ times larger than either U.S. imports or exports; it now totals roughly $350 billion per year. Projecting from the most recent Commercial Department estimates (made for 1970), U.S. multinationals' overseas employment should not be over 5½ million—just over the average *unemployment* in the United States during the calendar year 1974.

In this rapidly changing situation, where multinationals expand abroad as the domestic economy languishes, Congress has a duty to see that all necessary information is collected and that the economic analyses that depend on these statistics are responsibly carried out. Study after study in this area is forced to conclude with an apology for the tentativeness of its results—because the underlying economic statistics are too weak to provide solid analytical conclusions. We won't take up your time listing the various individuals and organizations who have lamented our government's irresponsibility in this area, but there are many respected experts who would certainly welcome more responsible data gathering and analysis.

On outward direct investment by U.S. multinationals—an issue of great concern to us and, we believe, to the Nation—the administration's recent record on data-gathering has been less than laudable. In this regard, we would like to bring to the attention of this subcommittee the dismal history of what happened when a responsible agency of the Department of Commerce attempted to improve its data collection on U.S.-based multinational firms.

The Bureau of Economic Analysis, Department of Commerce, has responsibility for gathering and assembling primary economic data on the foreign operations of U.S. multinational firms. Their

last benchmark survey was conducted in 1966, and they publish annual updated estimates on the basis of voluntary survey forms sent out to a small sample of the known universe of American multinational corporations.

As the multinationals' overseas activities increased, the Bureau of Economic Analysis recognized that their previous benchmark census had become hopelessly outdated, and that the range of information covered in the last benchmark was seriously inadequate to deal with urgent analytic and policy needs.

In late 1972, the specialists at BEA began their own preliminary analysis of topics that should be covered in such a study, and they devised draft survey forms to be sent out to U.S. multinational parent corporations and their foreign affiliates.

When this process was completed, the proposed forms were submitted for approval to a Cabinet level interagency clearing committee, the National Advisory Committee on International Monetary and Financial Policy (NAC)—composed of representatives from Treasury, Commerce, the Federal Reserve Board, the Export-Import Bank, and the Department of State. The proposed benchmark survey was handled at the National Advisory Committee by a working committee chaired by James Griffin of Treasury.

The proposed BEA survey would have expanded the scope of the data collected in 1966 and in subsequent sample surveys. For the first time they would have asked for detailed information on employment, skill levels, and employee compensation at home and abroad; on the cost and location of research and development activities; on production by product line; on taxes paid into different jurisdictions at home and abroad; on transactions between parent and affiliate; and on the treatment of domestic and foreign operations in the income statement of the parent firm.

This was not, in our view, an exhaustive list of what we needed to know about U.S. multinationals. It would have been far inferior to data presently collected on comparable domestic activities. It would, however, have represented a significant improvement over the data on multinationals presently gathered by the Federal Government. It would have fulfilled needs recognized by all users of data on multinational corporations, and the BEA understood it as necessary for responsible analysis and rational policy evaluation.

The reception given to this vitally needed expansion of our fundamental data base on multinational corporations was startlingly negative. The NAC rejected every item on the survey form that was not strictly related to balance of payments accounting—on the interpretation that the Bretton-Woods enabling legislation allows only balance of payments reporting. We call this a "strange interpretation" because even the weak analytic data that had been collected in 1966—without any challenge as to its legality—was now ruled out of order. Everything having to do with research and development, with the breakdown of production figures, with employment, skill levels and compensation, and even with trade between the multinational parent and its foreign affiliates—all that and still more was cut out of the proposed survey by this Cabinet-level interagency committee.

We find it hard to believe that such obstructive action, against the sound initiative of a highly professional Federal agency, could represent anything other than high Administration policy. Somebody up there doesn't want to know—or doesn't want the public and the Congress to know—the true facts about the multinational corporations and their effects on the domestic economy. This scandalous situation cannot be allowed to endure.

We think the record of failure to responsibly provide the public and the Congress with accurate, up to date information on multinational investment speaks for itself.

At issue here is our ability to analyze the makeup and operation of the huge multinationalized sector of the U.S. economy which, to date, has been kept hidden from responsible economic and social analysis. The Nixon-Ford Administration has blocked attempts at monitoring the activities of U.S.-based global firms. The multinational sector is too large and potentially too damaging a part of the American economy to remain behind the veils of corporate confidentiality. If rational policies that can strengthen the domestic economy are to be implemented, we must have reliable data on the multinational sector and its significance in our economy. We must place particular emphasis on the employment aspects of the question.

But let us return to what is seen as an essentially domestic issue. In the late 1960's, this Nation belatedly began to look into environmental quality—both on and off the job. From that time until this very day—and, I guess it will be true for years to come—spokesmen for industry have told everybody they could find that even modest environmental standards would mean the closing of many industrial facilities and the loss of untold thousands of jobs.

Despite industry's dire predictions, we've been unable to identify any significant number of plant closings in which safety, health or environmental requirements were even alleged as reasons for the action. And in those few cases where such causation was cited, we were rarely able to verify the claim.

We believe that safety, health and environmental questions will be with us for many years to come. We think that it is in the national interest to study, as completely as possible, the impact to date, as well as the potential future implications of such legislation and standard-setting on jobs and employment. Only with solid information in hand will we be able to look at these serious problems without being subjected to unverifiable polemics.

We've given you a few examples of areas where job-related data is needed and where presently available statistics are totally inadequate for national policy planning or response.

This inadequacy is not a recent discovery for us. For many years we have sensed that the absence of data along these lines was painfully apparent. We searched every conceivable agency, bureau, department and what-have-you to try and find out what was happening to the jobs of our members and in other sectors of the economy as well. We were unable to locate any source that could tell us such things as:

What sorts of industries are experiencing employment declines and why?

Have there been significant shifts in the traditional geographic patterns of plant installations of given industries or companies—and why ?

What identifiable patterns tended to surround the curtailment or closing of facilities?

To be sure, we had some hypotheses about such situations. We assumed that the "conglomerization" of the U.S. economy during the 1960's was destructive of work opportunities. We assumed that the tax incentives supplied by certain of the States and the anti-union attitudes that frequently characterize these same areas were responsible for the destruction of historical employment opportunities.

We also wondered about the increasing "multinationalization" of the U.S. economy. We wondered how many domestic employment opportunities were being lost to a combination of the tax incentives for job exportation provided by both our Government and host governments and the availability in some countries of heavily controlled labor forces.

At any rate, in our own modest way we undertook to compile a listing of incidents of plant closings and curtailments. We sought reports from unions affiliated with our organization, combed financial journals and other periodicals and cadged information from wherever we could.

Such an approach, obviously, is not totally scientific and we recognize that it is far from perfect. But as far as we know, it's the only ball game in town. National financial analysts, committees of Congress and various government agencies frequently come to us because they are interested in exploring one or more of the areas addressed in our survey.

While we are always pleased to share the results of our work with other investigators, we do so with great embarrassment about the inadequacy of our data. Because of the make-shift ways in which we collect it, we cannot be sure of how representative it is of occurrences in the economy at large, nor can we be sure that the sources we have used are correctly reporting the information that we plagiarize from them.

As of the beginning of 1975, our system had been in operation for four years. In that time span we had noted 1,701 situations in which jobs were permanently lost. Almost 1,300 of these cases represented permanent plant closings, while another 400 represented permanent curtailments. None of these instances involved short-term layoffs caused by economic fluctuations or other temporary events. We did not receive complete information on every reported situation but where we did, we discovered the following:

Less than 3 percent of the cases reflected claims that health, safety or environmental controls caused the action.

Approximately 25 percent of the closings and curtailments were related to the impact of foreign competition and they accounted for some 32 percent of all jobs lost.

The average foreign competition related closing involved 379 jobs lost and the average such permanent curtailment involved 559 people.

Another major reason for closings involved domestic relocations. most typically to low-wage, less urbanized areas. In these cases, an average of 262 jobs were lost in closings and 298 in permanent curtailments.

When we expand the information covering cases where we have complete data to all of the situations of which we are aware, we find that we can account for a loss of almost 500,000 jobs, of which 150,000 can be related to the pressure of foreign competition.

As I said earlier, we are aware of the very great limitations of this data, but at the same time we are frightened by what it seems to suggest. Is it not the sort of data that this Congress and this Government should cause to be collected with precision so that it might be at hand as the important economic issues of the day are considered?

Perhaps our data is not representative of what is going on in the economy at large, but only a well-funded and skillfully implemented study will be able to resolve that question.

Mr. Chairman, members of the Committee, we realize that we may have deviated a bit from the precise topic of these hearings, but feel that it is important to get on the record with our concern in these areas. These items strike us as ones that contain information which investors would need in order to deal in the stock market more effectively. Perhaps it is information which could be most readily collected by an agency such as the SEC.

We are not really too particular about who does the work, although we would want to make sure that it was done competently. As a nation we must put ourselves in the position to make rational economic policy on the basis of information rather than guesses. We must develop data that will alert us to potential employment problems before they become fatal ailments.

The data collection advances by the independent regulatory agencies (empowered by the Hart amendment to the Alaska Pipeline Act and outlined in the model reporting requirements) are steps toward more comprehensive reform of Federal data collection. In the not so distant future, piecemeal reforms in Federal data collection will have to give way to a more systematic, coordinated approach. To date, this lack of coordination in Federal data collection has led to such things as: incompatible information series; major gaps in the information that is collected; and inefficient and artificial barriers governing exchanges of collected information between agencies.

While information gathering has increased in scope, the different agencies too often gather their data on incompatible definitional bases. This makes it difficult for analysts, both in and out of the government, to compare related sets of data. For instance, our information on production, sales, employment, and wages, is collected by industry according to the Standard Industrial Classification (SIC's). But our import and export data are gathered according to the substantially different categories of the Tariff Schedule of the United States (TSUS). As a result, the depth of import penetration or export-related employment are often impossible to calculate.

In addition to these definitional inconsistencies, there are important areas where data are inadequate or not collected at all. We've mentioned a few of these this morning.

Alongside the missing information and the incompatible statistics, we see a third problem area: a lack of imagination in using existing data to derive additional needed data. One area that comes to mind immediately involves the foreign operations of U.S. global corporations and their impact on domestic production and employment. One branch of the Federal Government, an agency of the Commerce Department, has more or less adequate knowledge of the identity of U.S. multinational corporations; this information is stored on computer tape. But the Commerce Department has no current information on these firms' employment. The Labor Department, on the other hand, through the Bureau of Labor Statistics, has records of domestic employment patterns for the larger individual firms; and these records, too, are stored on computer tape.

It would be a relatively simple matter to run these two sets of information against each other and thus discover at least the domestic employment performance of U.S.-based multinational corporations. Such a procedure would be inexpensive. It would require no change in present reporting requirements, nor would it threaten corporate confidentiality in any way. Yet, under present arrangements, these two tapes cannot be bought together, and these important questions remain unanswered.

A few such information gaps can be closed quickly by utilizing currently gathered data. But in the longer run, our whole system of data collection will require streamlining. By eliminating unnecessarily overlapping and duplicative reporting, we could have more and better information, while significantly reducing the costs of data collection and reporting.

Mutually consistent data bases must be established, and existing information gaps must be closed, especially with regard to energy and the overseas operations of U.S. multinational corporations.

We recognize, of course, that such an overhaul of the Federal data gathering system is a long-term project. Yet the Congress can take some steps toward that future consolidation and streamlining without delay.

A first step would be an assessment of the present diverse programs of Federal data gathering. What questions are being asked, and by which agencies? What are the rules governing interagency exchanges of data? A comprehensive survey of present data collection will be essential for arriving at a more coherent, less costly system for the future. Such a necessary preliminary study could well be carried out by the GAO or the Congressional Research Service at the request of this Subcommittee.

Parallel to this exhaustive determination of what is now happening in Federal data collection, future reforms will require the careful consideration of alternative approaches to more comprehensive and coordinated data collection. There are many questions to be addressed:

What are the most promising conceptual structures for organizing industry data on a common basis?

56-957 O - 75 - 6

What is the range of possibilities for facilitating interagency exchanges of information?

How do we establish standards of confidentiality and protect against their abuse in such a comprehensive data system?

As the Congress implements the many needed reforms of our inefficient data gathering system, these questions should be systematically explored and answered.

In closing, I would like to endorse an idea that appears in the testimony of Dr. Abraham Briloff before the Senate Banking Committee on July 11, 1975. Dr. Briloff, a certified public accountant and professor of accountancy at the City University of New York's Baruch College, urged the creation of "a Corporate Accountability Commission to assume the overarching responsibility of identifying the total informational needs of our society * * * regarding our corporate enterprise and to see how this information can be best accumulated, digested and disseminated. Failing such a unitary trust I can see the present segmented, limited scope and responsibility as producing intensified conflicts within government, and an inadequate and inefficient response to the fair informational requirements of our modern democratic society * * * one which requires the delegation of enormous power and responsibility which, in turn, demands a reciprocal measure of accountability to those who have delegated the power."

Senator METCALF. We have a vote at 12 o'clock. We have a vote at 1:15.

TESTIMONY OF JUNE ALLEN, NORTH ANNA ENVIRONMENTAL COALITION, CHARLOTTESVILLE, VA.

The next witness is Mrs. June Allen.

Do you want to start testifying, Mrs. Allen, and have us recess at 12 o'clock to 1:30; or do you want to wait until 1:30 to testify? I am going to hear the witnesses today.

Mrs. ALLEN. I would like to do as much as I can. We would like very much to depart Washington at 3:30.

Senator METCALF. Let's hear you until five lights come up, because I know you have some important testimony. I am delighted to have you here.

Mrs. ALLEN. I am not sure I am up to competing with the construction noise.

Senator METCALF. I want to emphasize one of the things that Mr. Clayman said where he pointed out that less than 3 percent of unemployment cases, permanent unemployment, resulted from health, safety or environmental controls. I know you are going to talk about that same sort of situation. I welcome you here. I am delighted that you could come. I hope maybe we can complete our testimony before we have to recess.

Mrs. ALLEN. We will try. Thank you very much.

Can you hear me?

Senator METCALF. I am sorry about the carpentry work. I came to Washington some 20 years ago and they have been building or

rebuilding or constructing or reconstructing everything ever since I have been here, and I have no hope that everything will be finished before I leave. Thank you.

Mrs. ALLEN. I will try to speak above it. Please let me know if you can't hear me. Thank you for your kind remarks.

My name is June Allen. I am most appreciative of your invitation to testify as representative of the North Anna Environmental Coalition.

By way of brief background, I would like to tell you that the coalition was formed in January 1973 by citizens of central Virginia who were concerned that despite the serious and still unsolved problems of nuclear technology, and I am sure you know that chief among those are untested and unreliable emergency core cooling systems; lack of safe disposal for highly toxic radioactive wastes; and genetic and carcinogenic risks from cumulative low level radiation.

Despite this, plans were proceeding for one of the largest nuclear plants in the world, four reactors totaling 4000 megawatts, in Mineral, Va.

I have a map to show you that this is not just a matter of academic interest because the North Anna plants are just 70 miles from Washington and 40 miles from Richmond. They are right in central Virginia and Washington is in the radius of risk.

Senator METCALF. You are going to leave that map so we can put it in the record?

Mrs. ALLEN. Yes.

Every effort by the coalition on behalf of safety has met with hostility from Federal and State decision-making bodies.

Of this quartet of 1,000-megawatt reactors, No. 1 is now 80 percent complete and No. 2 is 55 percent complete. Construction permits have been issued for reactors 3 and 4, and their excavations were dug in 1973.

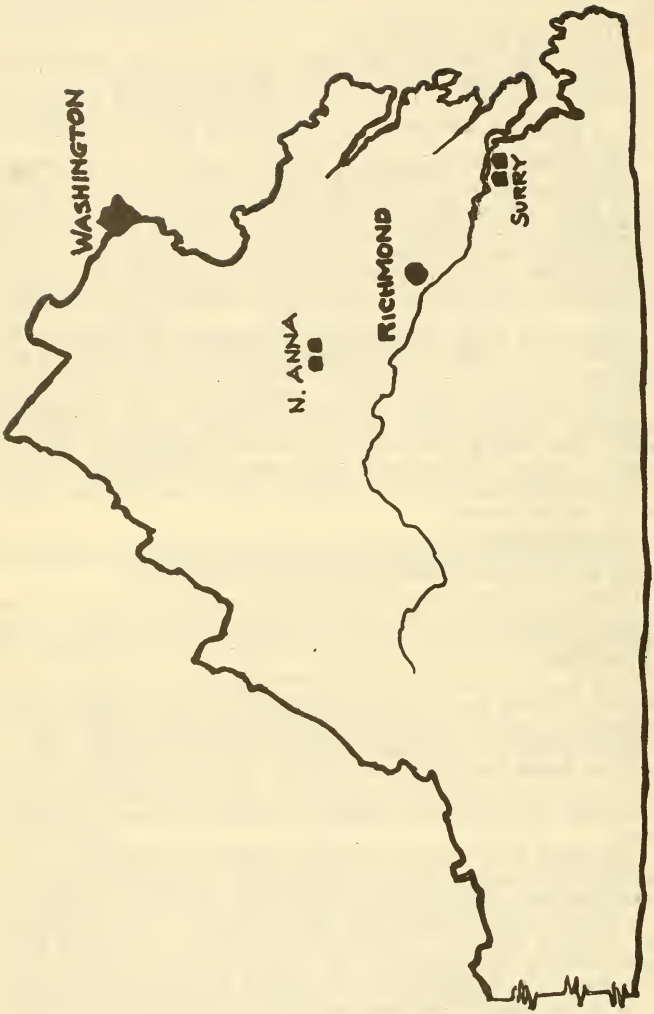
It is these excavations that put VEPCO's North Anna Power Station on front pages here and abroad—for they revealed a major fault zone cutting the ground directly beneath the nuclear site.

They forced the AEC and VEPCO to a disturbing but inescapable conclusion about reactors 1 and 2: over half a billion dollars' worth of complicated, temperamental, still-being-invented nuclear technology had been placed not only near, but directly astride a fault.

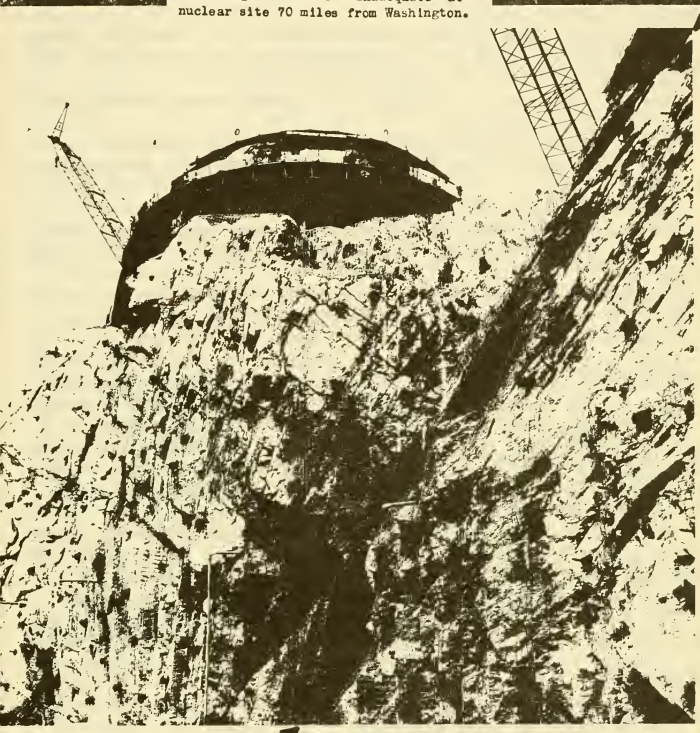
The North Anna fault is wet, clay filled, and surrounded by rock so fractured that stress measurements are impossible. Independent geologists shake their heads and say, "Why take such a chance?"

I brought some photographs that I thought would dramatize the situation for you, so you could see this scar or wound in the earth. This is the excavation for reactor 3. You can see the wet fault and the rock bolts holding the highly fractured surface nearby

[A reproduction of the map and photograph referred to follows:]


WASHINGTON
N. ANNA
RICHMOND
SURRY

JULY 24, 1975--NRC calls foundation engineering information "inadequate" at nuclear site 70 miles from Washington.



North Anna Reactor under construction looms above fault visible in excavation for Reactor # 3

Mrs. Allen. Then this photograph, a closer view of the fault itself with the reactor No. 1 looming above it in the background. Those pictures just returned from Tokyo. They were borrowed for a broadcast there where people are worried about the relation of faults to nuclear reactors.

Responsible Congressmen must ask how such incredible siting and construction could have been allowed in an industry and technology we are told is so carefully regulated.

Did the regulators fail to gather vital information, or, once gathered, fail to act upon it?

Your committee has already posed two central questions:

One: How good is the data upon which regulatory decisions are based?

Two: How can it be improved?

These questions would seem to reflect a basic idealism and belief that timely and accurate data must necessarily result in wise decisions.

Coalition study and experience since 1973 suggest that you should add—and carefully ask—the following questions in regard to information management by regulatory agencies:

One. Are there strong working assumptions that could cancel out new scientific data or soft pedal substantial scientific ignorance?

The strong working assumptions in the North Anna case were that nuclear power is highly desirable, and that geology is no problem in the East. Thus, the easy approval for this giant site even though both AEC safety evaluations—1970 and 1972—carry the statement: "Details regarding either local or regional (geological) structures are very poorly known."

In 1974, an Atomic Safety and Licensing Board ruled the North Anna site safe, despite the following admissions of ignorance by the AEC staff, and I think the record will support these.

The extent of the faulting beneath the reactors is not known.

The extent of faulting beneath the dam and Lake Anna is not known, and that is key, as I am sure you know, because the water at artificial Lake Anna provides the cooling for the reactors, most essential.

Accurate rock stress measurements are not known.

The date of last fault movement is not known.

The probability of fault lubrication is not known.

Mr. Turner. Mrs. Allen, I wonder if you might say what indications there are with respect to lubrication?

Mrs. Allen. There is a phenomenon discovered in Colorado when they were putting fluids into the earth and discovered that they could reactivate faults and create their own earthquakes by adding fluid.

So there is this possibility of increasing the load, of lubricating the fault and causing a previously inactive fault to become active.

I believe the AEC seismologist stressed that this is not a function of age. One of the major arguments in defense of the site has been that this is a very old fault, but the possibility of reactivating a fault by lubrication is not a function of age.

Going on, the competence of rock beneath units 1 and 2 is not known.

Senator METCALF. What is competence of rock?

Mrs. ALLEN. Simply how sturdy it is and whether it really is unfractured enough to support the reactors in the way that they need to be for the fragility—if that is the right word—of the equipment that they contain.

Last, which sounds innocent enough, the relation of the North Anna faulting to regional structures is not known. This seems to be of most concern to geologists because if the North Anna fracture is just a little crack, it is a small problem.

But if it is related to major geologic structures and there are two that are of concern, one is called Neuschel's Lineament and the other is called the 38th Parallel Fracture Zone. If there is a relation between the North Anna fault and these then we may have major geologic structures that should be explored and thought about.

Then, ironically, as a footnote, the American Nuclear Society maintains that reactors are not sited in fault zones.

The coalition believes that were this site suddenly bare of $750 million worth of construction and its shattered rock to be viewed by conscientious engineering geologists who were free of the working assumptions of the sixties, it would be rejected out of hand. See attachment 1.[1]

Two. Is there resistance to any negative information which might challenge the strong working assumptions?

I would like to make two corrections on this page, if I may, before proceeding.

In the second paragraph under the second question I would like to delete AEC. Then seven lines beneath that, six lines beneath that, change the wording "of" to "in," but the wording "in" the AEC safety evaluation shows, and then delete "regulatory agency."

Is that clear?

It appears from the North Anna case records, that from 1968 on, studies of the site revealed suspicious symptoms that the site might be ailing with fault sickness: Extensive jointing, stability problems, chloritic slick inside, collapse of the side walls of the excavation.

What was the thinking in the site analysis branch where these reports were read? Nothing happened.

We have some insight into the thinking regarding VEPCO's Surry nuclear site on the James River near Newport News, Va. Since 1945, there have been recurrent disturbing suggestions in the geology literature of the nearby Hampton Roads fault—the latest suggestion coming from offshore oil-investigation of February, 1974.

Independent geologists believe there is still not enough data to deny the existence of this structure near the Surry plant, but the wording in the AEC safety evaluation shows the need to view available data in a particular way: "Because the Hampton Roads fault would be in a critical position with respect to the site, much attention was paid to the details of the applicant's argument that the fault . . . does not exist."

Rewording that, it would seem to me to be saying, "Because

[1] See p. 110.

we don't want there to be a fault near Surry, we will pay attention to those arguments that say it isn't there, and we will ignore those geologists who postulate that it is there."

Going on—incidentally, that statement in quotation marks is from the U.S. Geological Survey assessment of the Surry site.

Three. Is sound, firsthand information desired? Is it actively sought, even under crisis conditions, unless that crisis receives heavy play in the press?

Given North Anna's consultants' reporting of suspicious fault symptoms culminating in acute collapse of reactor No. 1's excavation wall in 1970, one must ask why no AEC geologist visited the troubled site in its February crisis.

Records show an AEC inspector there on the 19th, 1970, who dutifully reported the unstable strata in the rock bed (that) allowed the lip of the excavation to slide in the hole.

Did that report ever reach the AEC project manager? Didn't he then pick up the phone and discover that VEPCO's consultants were flying in from Boston and were seriously considering faulting? Perhaps this committee can find out.

Senator METCALF. I don't know whether the committee can find out, but as the previous witness indicated, there is a lot of information that nobody gets around here. But I will direct our staff to try.

Mrs. ALLEN. Excellent. I do know that at least recently the procedure has been that information from the Atlanta AEC or now NRC, inspection office does come to the project managers. So we would assume that that same procedure was in effect in 1970. Thank you.

The geologist who actually arrived on February 23 was not from the AEC or the USGS. He was a professor from a local community college, and he was there because it evidently is in the nature of all geologists to take advantage of any excavation that ever appears anywhere and go look.

These excavations were mammoth and it was a marvelous opportunity. They took a field trip and took students to look. So there he was on February 23. And he couldn't believe what he seemed to be seeing—a major fault in a nuclear reactor excavation.

Dr. Funkhouser sought permission from VEPCO's resident engineer to return with expert colleagues. Dr. Goodwin, structural geologist and chairman of the geology department at the College of William and Mary, and a member of his faculty, Dr. Clement confirmed Dr. Funkhouser's shocked diagnosis: a classic textbook fault.

They photographed the fault, and used their slides with hundreds of students from 1970 on—a fact which increases the mystery of VEPCO and AEC ignorance of the structure. See attachment 2.[1]

Further, the three geologists testified to the AEC—they were actually deposed on the fault in 1973—that they called the fault to the attention of VEPCO's resident engineer, expressing concern as to whether this was a good thing to have in any kind of foundation. But that was in 1970.

Somehow the information was lost during the ensuing 3 years of continued construction, and somehow neither VEPCO nor the AEC

[1] See p. 119.

knew anything of this diagnostic visit of three independent geologists just at the height of geological crisis and consultation among the geologists of VEPCO's constructor, Stone & Webster. Truly unaware of the infirm foundations were the press and the public.

Dr. Goodwin later told the press when they called him in 1973, "Any fault is not a good place to build reactors. Chlorite is very weak and weathers rapidly. We just don't know what the long-term effect of water seepage in rock faults is."

Sadly, the last question that we think you must ask is: Is it possible that information submittal to regulatory agencies is an expensive and tardy exercise to justify premade industry/agency decisions rather than a genuine effort to find information upon which to base decisions?

VEPCO's contract with North Anna constructor Stone & Webster was signed in 1966; in 1967, the contract for North Anna unit 1 was awarded to Westinghouse for $446 million. Not until 1968, as far as we can discover, were studies made of North Anna geology and site feasibility.

By the time construction license hearings were actually held before an atomic safety and licensing board in November of 1970. And you recall all of this crisis in the excavations was February 1970—by the time the hearings were held in November of 1970, millions of dollars worth of momentum was rolling at the site. Steel liners hid the faults in the excavations.

Only the naive public thought the hearings were actually held to decide whether or not to construct the nuclear station.

Nevertheless, the parties to the construction license hearings, particularly the AEC staff and VEPCO, had a responsibility to adduce information on a key construction issue—foundation conditions. Neither VEPCO nor the AEC brought up the subject.

The Board asked no questions about site suitability.

This pattern of 1970 repeated itself in 1973—even though during the exact hours of the hearing on construction licenses for reactors 3 and 4, international experts were at the site, trying to decide what to do about their severely faulted excavations.

Two such blatant instances of failure to adduce key information ultimately became part of the basis for VEPCO's conviction in April of this year of having submitted 12 material false statements on North Anna faulting to the AEC.

The NRC conviction, however, came only as a result of persistent citizen action and not because of regulatory or State insistence upon integrity and completeness of information.

The State was a party to this action. The AEC had actually put out an embarrassingly sloppy investigation report vindicating VEPCO in March of 1974. See attachment 3.[1]

The AEC staff also tried to help VEPCO out of its difficulty in 1973 by having their geologist send an affidavit to the Board predicting that an expensive study by Dames & Moore would resolve all site problems when it was published in August.

I brought it because it is such a marvelous piece of publication. I thought you might be interested in taking a quick look at the

[1] See p. 123.

photos that are in it and to realize that it has been almost totally discredited by the AEC by many, many questions that followed after this definitive report.

Senator METCALF. Is that the only copy of that study that you have?

Mrs. ALLEN. That is the only one that I have, but I know that the AEC has many.

Senator METCALF. We will obtain another one.

Mrs. ALLEN. Very good.

There is a little book mark in there that shows you a photo that was available to them of reactor excavation 1.

But between the affidavit and the report came the coalition news release. This was followed by a major story in the Washington Post which surprised and embarrassed the Joint Committee on Atomic Energy and probably had a significant effect upon the manner in which the North Anna site and other sites were studied from then on.

As I said, many questions followed from this report rather than its solving the problem, as had been predicted by the affidavit.

But we fear site selection study and reform come too late to have any effect upon the health and safety of Virginians. Construction goes on feverishly at this fractured site where even the design is inadequate. The Advisory Committee on Reactor Safeguards (ACRS) said recently that reactors in the Piedmont and the Coastal Plain should be designed against .20 g horizontal acceleration, gravity. North Anna—in the Piedmont and on a fault—is designed only against .12 g while Surry—in the Coastal Plain and subject to liquefaction—is only designed against .15 g.

The concept of adequate seismic design is a questionable one—especially in the light of AEC reports that many seismic shock absorbers leak, and half—I think more than half, actually—the seismic restraints at Surry cracked and had to be redesigned and replaced.

It is our information that these same parts cracked at North Anna and have caused great delay and are now the subject of a suit by VEPCO for $153 million against the manufacturers.

The seismic design statement by the ACRS was a pleasant, if late, surprise. Despite that body's admirable name—safeguards—the impression is unmistakable that their major function is to lend expensive and prestigious approval to the premade industry-agency decisions referred to in question 4.

There is no evidence in their letters originally approving North Anna and Surry construction that they were aware of or concerned about serious foundation problems at both sites.

Further, minutes and other documents forced from their files under the Freedom of Information Act are heavily censored, more deletion than document.

Thanks to the efforts of our superb young lawyer, Professor William Rodgers, of Georgetown, there was a motion to compel ACRS documents for the showcause hearing.

I think that the deletions are dramatic. You can see that the letters, many of the letters regarding the North Anna site, would have a preliminary paragraph, "Dear John: Nice to hear from you," and then the remainder of the thing would be totally blank.

I would in fairness say that in chambers the board at the show-cause hearing did restore some of this material. But I think it is significant for you to know the manner in which the material came from the ACRS.

Mr. Turner. Mrs. Allen, one other point right here, if this geological fault had been identified and admitted by the VEPCO and NRC early on before the construction, could VEPCO have shifted the plantsite to another location where such hazard might not have been presented?

Mrs. Allen. That could have been suggested, I think, informally by the State geologist and perhaps more formally by Dr. Paul Roper that at least the plants could be moved off the fault.

Dr. Funkhouser said it looks as if they were sited right onto it. They could have been moved 200 yards and then at least the reactors themselves would not be sitting immediately on the fault so that as they are now, they are subject to shear as well as shake. If they were moved off the fault, then there would be that much added safety margin.

Mr. Turner. But this would be before the construction started?

Mrs. Allen. Yes. It would be a matter of digging a different hole. I would think so. Yes. Did I answer that adequately?

Senator Metcalf. It would still be, if you moved it how many yards?

Mrs. Allen. I think 200 yards. It would still be certainly in a faulted area. There is no denying that.

Senator Metcalf. If you just moved it that far you would only remove the shearing; you wouldn't remove the earthquake or shaking of it.

Mrs. Allen. That is right; absolutely. The fact that they are in Mineral, Va., should be a signal, because minerals precipitate out along faults and we know that there is other faulting in that area.

Senator Metcalf. The very name of the area should have been a red flag to them.

Mrs. Allen. Right, but I think the area was chosen because of proximity to cooling water possibilities and to the electric load rather than with any worry about foundations.

Going back to the available information, materials from the files of the U.S. Geological Survey, the USGS, were remarkably complete. They were very cooperative in supplying information; containing such remarks as "I would keep my fingers crossed and would not want to live near North Anna," by one of the USGS men.

And another: "It is disturbing to have four reactors cut by a fault made up of clay gouge—that is the wet, soft material that is in the fault—such a fault zone does represent a potential plain of movement—all in all, I am not happy about the situation."

The misgivings quoted above, however, had no effect in 1974 against the expensive nuclear momentum that had been rolling at North Anna since the USGS visited the site in 1969—but this was just kind of a walk through the fields; there was no excavation at that point—and declared VEPCO's geologic appraisal "adequate" in 1970—an appraisal, incidentally, which put the closest fault at distance of 5 to 6 miles.

The strong working assumption was "nuclear plants are go," even

as the USGS readily admitted that geologic structures in the area were "very poorly known" as were—and are—the causes of the famous Charleston, S.C. earthquake.

Now there is a study grant from the AEC to the USGS to explore the causes of the Charleston quake, which is pretty ex post facto when you consider that one of the most risky nuclear situations in the country is in South Carolina. This is the Barnwell reprocessing plant which is going to be the scene of wastes coming from reactors from many places to be stored and reprocessed in an area that is more seismically at risk than Virginia.

They are studying it now. One of the USGS men told the coalition that we have no handle on eastern geology, but—this is the point that seems crucial to the concerns of this committee—no one ever said "Wait a minute. Maybe we should get some more information before we site nuclear plants all over the East. Do we really understand seismicity in this part of the country?

"Will reactor seismic design stand up against shake—let alone against shear directly beneath the plant? What will our cooling water impoundments do to the stability of the area?" We have added 13,000 acres of water, I believe.

Senator METCALF. Mrs. Allen, that is five bells. That indicates I only have 5 minutes to get over to a rollcall. I will, for the benefit of the next witness, too, answer this rollcall, immediately return and we will finish this hearing this morning.

We will run right straight through until all the witnesses testify. If you will excuse me for a few minutes, I will be right back and hear the rest of your testimony.

Mrs. ALLEN. I appreciate that very much.

[Brief recess.]

Senator METCALF. The hearing will resume.

I see you were at the bottom of page 7.

Mrs. ALLEN. I will pick up there because you were kind enough to maybe let me ask that question again because I think it is terribly important.

The thing that seemed really crucial to us was that no one said "Wait a minute, maybe we should get some more information before we site nuclear plant all over the East?" De we really understand seismicity in this part of the country? Will reactor seismic design stand up against shake, let alone shear, directly beneath the plant? What will our cooling water impoundments do to the stability of the area?

Senator METCALF. I think that is an awfully important question. Some of the concerns that this committee and our last witness have is we have inadequate information—but as your outline of testimony and development, and so forth, you say we have the information and nobody acted on it.

Mrs. ALLEN. In that particular site, yes; overall, no. In other words, the USGS said we have no handle on eastern geology overall.

Senator METCALF. Are we going to build nuclear sites on the San Andreas fault? When we find the fault, are we going to continue to build? We had this information.

Mrs. ALLEN. What you are asking is terribly significant. You probably know that originally the ACRS gave tentative approval

to the Bodega Bay Plant, which was only 300 yards from the San Andreas Fault, and again the only reason that that plant did not proceed was energetic citizen action against building near the San Andreas Fault, which seems unfortunate when we have regulatory people who should really be looking at that kind of problem.

Senator METCALF. I was fortunate enough to attend Stanford University, and all over the campus are remnants of the old Stanford University, the chapel, et cetera. It was all shaken down by the San Francisco earthquake. We know where that fault is. I am afraid that if the procedure referred to in your testimony would be carried out in California, they would build another nuclear plant over there. I suppose it doesn't hurt to build a university on a fault. The earthquake just shakes down buildings.

Mrs. ALLEN. But here the risk is very great.

Senator METCALF. The other testimony was we didn't have adequate information and then all at once you come in. We are exporting jobs, and now you are telling us that we have known about this situation, we have gone ahead and it is not jobs but lives that are at stake.

Mrs. ALLEN. I am glad that you really see the serious implications of this. That certainly is admitted, that lives are at stake.

One aside, because you brought up the San Andreas Fault and the San Francisco quake, we understand from the USGS that the majority of damage and loss of life from the San Francisco quake was due to liquefaction: that is, the buildings that were on soil that liquefied, that became jelly with the quaking received the most damage.

I mention that because liquefaction as opposed to, or perhaps in addition to a fault, is the risk that we are aware of at the Surry site, the other nuclear site in Virginia.

By the time the North Anna fault scandal broke in 1973, it was too late to ask these vital questions. Too much money had been spent in combined geologic and nuclear ignorance, and nobody associated with the project had any stomach for the possible answers.

Thus, the work of Dr. Roper, an expert Piedmont geologist, who, incidentally, I should have said was a consultant to Dame & Moore, who suggested that the reactors be moved off the fault and that suspicious regional, emphasize regional, geologic structures be checked out before any nuclear operation began, had to be suppressed.

Actually, the omission, the failure to submit the Roper report was considered by the NRC Board to constitute a material false statement. Better to risk a material false statement and an accident than a bankrupt venture. [See attachment.[1]]

Economics triumphs handily over prudence. Agency supports agency in early superficial approval of utility documents. No one really worries about the hard questions or about looking at first-hand information. And I emphasize that because it seems that these approvals by the USGS and by Blume and Associates in San Francisco who were the consultants at that time to the AEC; these approvals were based upon looking at the utilities' documents. So they

[1] See p. 110.

didn't go back to the first sources. They simply approved what the utility submitted. An NRC project manager told NAEC he was used to having things mismapped and misrepresented. NRC's Director of Regulation said: "We are used to optimistic stories from licensees and we discount them."

But they don't discount them. When a major problem arises, the NRC tells the utility to investigate itself. When abnormal settling was suspected at Surry in May—and, incidentally, that report came from a confidential informant; it did not come from the utility itself—VEPCO called back its constructor, Stone & Webster, whose great need was to prove that what they had designed and built on a "suspect"—and that was the NRC-AEC adjective for the site—what they had built on the suspect site had retained its equilibrium.

The NRC required no disinterested consultant, instead, its staff reported that VEPCO convinced us there was no problem.

For years, NRC accepted VEPCO's statement on North Anna that faulting of rock at this site is neither known, nor is it suspected. Once it did become undeniably suspected and painfully known, VEPCO was allowed to return to those same consultants, the very people who said the fault was not there at all, to return to those same consultants now for them to prove that, although the fault was there, it was ancient, benevolent, and harmless.

No objective opinion was required. It is almost impossible to escape the conclusion that objective opinion, sound information, represents a major threat to the nuclear industry. The seismic gamble alone is considerable, and according to a minority opinion by Dr. Okrent of the ACRS—this is a quotation from his letter:

> * * * inadequacies in design and construction exist * * * it appears unlikely that a plant could survive safely a large earthquake * * * earthquakes are almost unique in their ability to fail each and every structure, system, component, or instrument important or vital to safety.

I am sure that you gentlemen know that a fault obviously indicates the position of a past earthquake and is a very likely spot for a future earthquake.

Radiation risks are greatly increased by seismic uncertainties. Radiation risks particularly for radioiodine to the thyroid are the subject of warnings, even from nuclear proponents, enthusiasts like Dr. Ralph Lapp.

I would like to submit quotations from Dr. Lapp, where he feels that the AEC underestimates the radioiodine risk that they fail to differentiate between the infant thyroid and the adult thyroid, and that even he, as one of the most enthusiastic proponents of nuclear technology, is concerned about the risk of radioiodine to the thyroid.

Senator Metcalf. That information will be incorporated in the record at this point.

Mrs. Allen. Along with that, with the quotations from Dr. Lapp, I would like to include work by Dr. Irving Lyon, who has done a careful study of biological hazards and the AEC treatment of same near the Point Beach Plant in Wisconsin.

He shows very disturbing levels of iodine in the milk in that area. I would like to incorporate that in the record, if I may, please.

[The information referred to follows:]

Excerpts from papers by DR. RALPH E. LAPP, atomic scientist who supports the use of nuclear energy...

"The Heart of the Nuclear Controversy" (to Atomic Industrial Forum 11/73)

...As you all know, the AEC's accident yardstick has nine gradations ranging from Class 1 or trivial accidents with no off-site consequences to Class 9 or catastrophic events with serious potential off-site consequences...The consequences of Class 1 through Class 8 accidents are required (by the AEC) to be estimated in the applicant's Environmental Impact Statements, but Class 9 is excluded from EIS. Off-site consequences of Class 8 events are of little significance to health and safety beyond the Low Population Zone (LPZ).

...I reexamined the technical basis for the AEC's definition of the LPZ radius...

AEC UNDERESTIMATES RADIO-IODINE RISK

...in my investigation I discovered that the AEC has made no distinction between the adult thyroid and that of the infant. The Commonwealth of Pennsylvania has to consider the most vulnerable segment of its population at risk. A 30 rem infant thyroid dose is postulated as a reasonable emergency dose limit for iodine-131 deposition from inhalation. Using this line of reasoning, I came to the conclusion that the 4 to 5 miles stipulated by ACRS (9/27/73 testimony before the Joint Committee on Atomic Energy) would very considerably underestimate the risk situation.

My own feeling about the Newbold Island case (denied by the AEC because it would place reactors only 11 miles from Philadelphia) was that, if the site were permitted, the reactor should be equipped with additional safeguards, i.e. stronger secondary containment and engineered release of accident related radioactivity.

For example, rather than wait for containment to be over-pressurized and vent fission debris at low level, it would be desirable to depressurize through controlled release through a trap-stack. A 100 meter stack is a potent mitigator of radiation dose in the 0 to 5 mile zone around the reactor site.

...public attention is again centering on what the AEC used to call the MCA--the maximum credible accident, now designated as a Class 9er.

I have deliberately invoked discussion of a Class 9 accident in the instance of Newbold Island to illustrate the problem of translating the radiodine risk into terms understandable to the public.

The AEC does not have a rational siting policy for industry to follow and depends more or less on an ad hoc applicant by applicant improvision. Thus the AEC's stand on Newbold Island must be regarded as a landmark decision--in effect, saying to utilities "Come no closer to cities."

LAPP Excerpts. . . . . .Page 2

...The AEC's failure to revise WASH-740 played right into the hands of the nuclear opposition, allowing fearful extrapolation of reactor risk. Indeed, the AEC even accentuated this problem by publication in July 1971 of a Battelle Columbus Laboratories report (BMI-1910 AN EVALUATION OF THE APPLICABILITY OF EXISTING DATA TO THE ANALYTICAL DESCRIPTION OF A NUCLEAR REACTOR ACCIDENT-CORE MELTDOWN EVALUATION) in which the statement

- "The 300-rem thyroid dose would be exceeded for distances up to 100 miles downwind from the reactor site" can be isolated...

It is the community that takes the risk--but the risk assessment is remote from the community...

A small community close to a reactor site is ill-equipped to second-judge the soundness of a nuclear risk assessment. Even the largest cities lack the mechanism for appraising the risk. Certainly the community is justified in viewing corporate estimates of reactor risks,,,with a degree of suspicion...

For a variety of reasons the Atomic Energy Commission's credibility coefficient...so far as the public is concerned is still quite low....

If the risk is very low, it could be argued that the plants can be sited anywhere and that no emergency plans are necessary...But accidents do happen--because men and mechanisms are fallible--and I think it is worth while to contemplate the consequences of a nuclear accident. A Class 9 accident of major consequence reckoned in terms of loss of life and radiation casualties could blight the nuclear industry...

"Public Assessment of Nuclear Risk" (to Joint Committee on Atomic Energy 1/22/7

...I think it is fair to say that opposition to nuclear power now concentrates on the following trio of hazards:

1. The danger of a nuclear accident, i.e. a pulsed release due to meltdown and faulted containment.
2. Ultimate waste disposal of long-lived fission products and actinides, i.e. the Federal Repository.
3. Plutonium--both as a health hazard and as a weapon-threat.

...I shall address my testimony to risk assessment of a power reactor accident. In particular, I shall be concerned with Class 9 accidents or those in which sequential systems failures lead to the release through containment of serious radioeffluents...

Fortunately, the industry has never experienced a Class 9 accident. But this fact cannot be used as statistically significant...since the number of reactor years is too small. Power reactors are complex pieces of equipment, and they do exhibit a record of abnormalities...

LAPP Excerpts. . . . . Page 3

Nuclear engineers have the option of adding mitigating devices to reactor systems...

A tall stack, for example, represents a potential means of reduction of near-site effluent dose in the event of an accident...the stack release could effect a hundred- or a thousand-fold dilution of the stack effluent as compared to the low-level concentration that would otherwise characterize a near-site point in the down-wind direction...

The dominant isotope of iodine is iodine-131, an 8-day half-lived species. A 3440 Mwt reactor, typical of the 1000 Mwe class, (size at North Anna and Surry) would build up an inventory of 86 million curies of iodine-131, or of the order of 10 curies of activity per fuel pellet.

> Such a reactor generates iodine-131 equivalent
> to that produced by a 700 kiloton explosion
> or 35 Nagasaki class weapons.

...I have suggested on two occasions that the AEC should recast its radioiodine criteria in terms of a lower dose to the infant thyroid. My reasons are:

1. Data available since 1962 indicate that the infant thyroid is sensitive to relatively modest radiation doses. The Bravo nuclear test...exposed Rongelap children to radiation hazards terminating with evacuation from the island at a time 36 hours after the Bravo shot. (March, 1954)

   A total of 19 of 25 Marshallese children under the age of 10 at the time of irradiation have exhibited thyroid pathology and 16 have required surgery. Two Rongelapese children exhibited growth retardation due to hypothyroidism...

2. ...Actual thyroid burdens for very young children would be 3 to 4 times that for the adult thyroid when there is common exposure to the same concentration of radioiodine...The fetus in utero would be sensitive to radiodine uptake after thyroid function begins.

EMERGENCY MEASURES: Communities planning emergency measures for nuclear accidents need to establish radiation protective action guides, taking into account the most vulnerable sector of the population. The guide considered by some states contemplates evacuation when the infant thyroid dose would exceed 30 rem.

Emergency action to minimize radioiodine dosage could include (a) administering potassium iodide (KI) tablets to block uptake of radiodine; (b) use of protective masks; and (c) shelters. My impression is that many states and communities could benefit from having available better estimates of the radiation hazards associated with reactor accidents. While they may be told that the probability of a nuclear accident is very low, they are the risk-takers, and they have responsibility for protecting the public health and safety

SOME BIOLOGICAL HAZARDS

of the

POINT
BEACH
NUCLEAR
POWER
PLANT

Irving Lyo
Ph. D.

SOME BIOLOGICAL HAZARDS

of the

POINT BEACH NUCLEAR POWER PLANT

IN WISCONSIN*

By Irving Lyon**

The appearance of radioactivity in milk produced in the vicinity of the POINT BEACH NUCLEAR POWER PLANT in Wisconsin (as indicated in State Radiological Reports) raises serious questions for the residents of that state and others in the nation who consume these products. The levels of radioactivity exceed those permitted by the AEC.

In addition, according to a recent Report of AEC Inspections of the Point Beach Plant, there are a number of problems concerning the monitoring of radioactivity.

The purpose of this Report is to examine more closely this situation and its implications for public health and safety; and, to assess whether or not it is possible to eliminate these hazards in the future.

BACKGROUND INFORMATION:

The roentgen, r, is a unit of radiation defined in terms of the energy associated with X-rays or gamma-rays. This energy, resulting in the ionization of air within a given volume, is expressed in energy units, ergs, per cubic centimeter of air. The roentgen may also be expressed as the quantity of X- or gamma-radiation that will produce a unit of positive or negative electric charge due to ionization of air molecules in 1 cubic centimeter of air. Actually, the roentgen is too large for convenience in a number of applications. Therefore, a unit one thousandth as large, the milliroentgen or mr, is often used.

- -

* This report is based on information supplied by Gertrude Dixon of Stevens Point, Wisconsin, Head of Research for the League Against Nuclear Dangers (LAND).

** Irving Lyon earned his Doctorate in Physiology at the University of California, Berkeley, in 1952. Following a Fellowship for two years in the Department of Nutrition at the Harvard School of Public Health, Dr. Lyon carried out research in industry in a major city hospital and in academia. His experience includes both undergradnate and gradnate teaching, including medical school bio-chemistry and undergraduate administrative work. He is the author of more than 30 technical reports in bio-chemistry and bio-physics published in internationally-known journals. Dr. Lyon is a Fellow of the American Association for the Advancement of Science and a member of other scholarly societies. He is a Consultant to the Dairy Industry. Since 1963 he has been actively involved in assessing the Biological and Environmental Impact of NUCLEAR POWER PLANTS.

The RAD - or Radiation Absorbed Dose - refers to the amount of radiation actually absorbed by the body or various tissues within it.

The REM - or Roentgen Equivalent in Man - provides a means of relating the different energies of ionizing radiations to one another to determine and assess equivalent effects in the human body.

In practice, the Roentgen, Rad and Rem are commonly taken to mean essentially the same thing. Thus, one thousandth of each of these units - mr, millirad (mrad) and millirem (mrem) - is used interchangeably.

The biological significance of Radioiodine, I-131 (half-life of 8 days), Radiostrontium, Sr-90 (half-life, 28.6 years) and Radiocesium, Cs-137 (half-life about 30 years) lies in the capacity of plants and animals - including human beings - to take them into their living substance where they may undergo radioactive decay. During this process energy is released. The potential damage of these, and other Radionuclides, is proportioned to the energy of decay absorbed by living cells and tissues.

Furthermore, Iodine - radioactive or not - is quickly and strongly concentrated within the thyroid gland. Strontium, whose chemical properties closely resemble those of calcium, is primarily concentrated in bone and other mineralized tissues. While cesium, with chemical characteristics similar to those of potassium, tends to distribute in the soft tissues (such as muscle) of the body. It is clear, then, that I-131, by localizing in the thyroid gland (especially in children) can cause thyroid tumors as well as other thyroid problems. More significantly, I-131 released into the atmosphere from Nuclear Power Plants thru their off-gas venting systems, along with other radioactive gases

(Krypton 85, Tritiated Water Vapor, Radioxenon, etc.) may fall upon grass where cows graze. Ingestion of this grass by cows is followed by the appearance of I-131 in milk, a qualitatively and quantitatively important food for children. In this way, children are probably more prone to biological harm and damage from I-131 than others in the population.

Sr-90 can substitute for calcium in bone mineral. The fairly rapid turnover of the soft, spongy bone bordering the marrow cavity - especially of the long bones of the body - puts this radionuclide into close proximity both to the maturing red and white cells of the blood-containing sinuses and certain other types of cells, involved in immune responses, which protect the body against foreign and native toxic substances. As a result, these cells may be damaged by radiated energy released by radioactive decay of the neighboring atoms of Sr-90. The body may subsequently show evidence of leukemia and/or a variety of abnormalities in immune responses, some of which may become manifest by increased allergic sensitivity or by decreased resistance to certain communicable diseases.

Cs-137, because of its similarity to potassium, distributes itself throughout the soft tissue of the body. The release of its radioactive decay energy therein may also give rise to cancers and other disease conditions. Furthermore, Cs-137 - as is true of I-131 and Sr-90 - may undergo biological concentration of several thousand-fold. This means that the flesh of fish, for example, may show a concentration of Cs-137 2000 times or more higher than the concentration of Cs-137 in the water in which the fish swim. Moreover, the capacity of Cs-137 for binding to soil particles suggests, as has been found, that it would be available for concentration in food plants and vegetables.

The releases of radioactivity from Nuclear Power Plants are established by the AEC* according to the cost and availability of equipment and instrumentation involved in normal radionuclide holdup and release activities of the plant.

Up to 1972, the AEC "allowed" 80-100 pCi of I-131 per liter of milk. This concentration, assuming a daily consumption of 1 liter of milk, would result in a cumulative thyroid dose (in children as the most sensitive group in the population) of up to 625 mrem/ year, more than 6 times an assumed average natural background radioactivity of 100 mrem/year.

---

* Now ERDA, Energy Research and Development Administration, and NRC, Nuclear Regulatory Commission; but, for brevity, referred to throughout this report as AEC, Atomic Energy Commission.

In 1972, the National Academy of Science recommended a 100-fold decrease in allowed releases. Applied to I-131 in milk, this would mean a concentration of about 1 pCI/liter, or, an annual dose to the thyroid of a child of approximately 6 mrem.

AEC's Regulatory Guide 1.42, June 1973, indicated that the maximum concentration of I-131 in milk should be 2.4 pCI/liter which corresponds to an exposure dose to the thyroid of a child of 15 mrem/year.

Milk samples were collected at the Korneby Dairy, Mishicot, 5 miles from the POINT BEACH NUCLEAR FACILITY. This Dairy is a milkshed which processes raw milk from approximately 70 farms in Manitowoc County. Each farm contributes a daily average of 600 lbs. of milk (about 270 liters of milk). The samples were found to contain radioactivity at levels between 5 and 10 pCI/liter, corresponding to annual thyroid doses between 30 and 60 mrem. This is between 2 and 4 times the AEC recommended maximum annual thyroidal exposure.

Furthermore, the AEC's Regulatory Guides 1.42 and 4.3 recommend a detection limit for I-131 in milk of 0.5 pCI/liter at the time of sampling. Moreover, sampling for I-131 must be weekly. Wisconsin Electric's I-131 monitoring is carried out by the Radiation Protection Section (RPS) of the Wisconsin Department of Health and Social Services with instrumentation capable of a lower detection limit of 5 pCI/liter. And the utility apparently does not receive milk sample analyses more often than once a year. Lawrence McDonnell, Wisconsin's new Chief of RPS, has stated that analyses will be based upon the stricter detection limits set by the AEC, but on a monthly, rather than a weekly basis.

IS THE AEC PROTECTING THE PUBLIC?

The AEC is eager to point to their exclusive responsibility in the field of radiation/radioactivity, a responsibility given over to them by Congress. However, even while touting this exclusive control over matters radiological, recently reaffirmed by the United States Supreme Court following a challenge by the State of Minnesota, the AEC is quick to shift its responsibility for radioactive releases from Nuclear Power Plants and monitoring activities onto licensees, the utilities owning and operating these plants, and/or state or other public agencies. If this constituted a responsible delegation of authority, such actions by the AEC could indicate a primary concern for the public's radiological health and safety. Unfortunately, the number games and word games played by the AEC suggest otherwise.

What are some of these games? The situation in Wisconsin, centering around the radioactivity released from Units 1 and 2 of the POINT BEACH NUCLEAR POWER STATION, seems to provide a good case study in partial answer to this question.

A letter dated April 26, 1974 from James G. Keppler, Regional Director of the AEC's Directorate of Regulatory Operations for Region III, to Sol Burstein, Senior Vice President of the Wisconsin-Michigan Power Company, refers to an Inspection Report conducted by L. R. Greger of the Directorate. The inspection was announced ahead of time and took place March 6-8, March 28 and April 2-3, 1974. Although Greger's name is typed in as The Principal Inspector, the name J. A. Pagliaro is written in and the report is dated April 23, 1974. Mr. Pagliaro was not accompanied by any other inspector or Directorate personnel and his report was apparently reviewed by himself, according to his signature, April 23rd, 1974, as Senior Environmental Scientist, Environmental and Special Projects Section.

Mr. Pagliaro did not examine "... the licensee's contract laboratory personnel, equipment or procedures". But he noted several findings in his inspection:

(1) The method of maintaining "... monitoring records was not conducive to retrieval of date, ..." concerning environmental radiation and radioactivity.

(2) There were "... several apparent incorrect entries ..." of monitoring results presented in a previous report.

(3) There were "... several abnormal ... monitoring results ..." and "... no apparent follow-up action by the licensee ..."

(4) "... preventive maintenance procedures were discussed ..." in connection with calibration of air sampling instrumentation, including flow meters and vacuum gauges. Apparently there is no formal program for the calibration and maintenance of monitoring devices. In regard to "in-house" monitoring, one can justifiably raise questions about the propriety of a licensee monitoring itself where public health and safety are involved. If the meters and gauges were being calibrated at the time of the inspection, it is obvious that air samples were not then being collected or analyzed.

(5) I-131 analyses in "... milk samples did not meet current AEC guidance with respect to the detection limit ..." Moreover, results were received annually and were not thoroughly reviewed by the licensee. It was suggested that the utility look at ways to improve the program for sampling milk.

(6) Fish kill information was required to be reported only if "significant" (without any definition of "significant").

(7) Technical Specifications did not provide for control of chemicals released into the environment through the retention pond.

(8) The licensee had not carried out a detailed examination or analysis of the "Non-Radiological Surveillance and Evaluation Program".

In a description of details included in the report, accompanying Mr. Keppler's letter, it was acknowledged that "a formal program does not presently exist for periodic conduct of comprehensive audits of the environmental monitoring programs". With uncalibrated monitoring equipment, devices for measuring radioactivity in milk one-tenth as sensitive as required by the AEC, and in the absence of the required comprehensive audits, how can the AEC conclude that "... the licensee's radiological environmental monitoring program conformed to the current regulatory requirements ..."?

AEC STANDARDS: ONE SET FOR INDUSTRY - ANOTHER FOR THE PUBLIC?

Donald F. Knuth, Director of Regulatory Operations of the AEC, in a letter to Senator William Proxmire RE: I-131 in Milk in the Area Near the POINT BEACH NUCLEAR POWER STATION, dated October 15, 1974, states: "There is no evidence to indicate that the Point Beach Plant has exceeded any regulatory limit for the release of radioactive material to the environment". Yet, in the same letter, Mr. Knuth notes that milk samples for I-131 analyses are collected monthly - not weekly as required by AEC; collections are made at a milkshed 5 miles from the plant with no indication of I-131 levels in milk samples from individual dairy farms nearer to the plant. To appreciate what this could mean, consider the following possibilities. Some 70 farms contribute a daily average of about 270 liters of milk to the milkshed. The maximum concentration of I-131 permitted by the AEC is 2.4 picocuries (pCi or 1x10-12 Ci, or a millionth of a millionth of a curie) per liter. This concentration could easily be reached and exceeded in the milk pooled from the entire milkshed if the concentration of I-131 were ten times higher than the AEC maximum in milk from only 7 or 8 farms closest to the plant. Furthermore, although the AEC recommends detection equipment with a sensitivity down to 0.5 pCi/liter (AEC Regulatory Guides 1.42 and 4.3), the equipment available for determination of I-131 in milk can only detect down to 5 pCi/liter. Thus, 4.9 pCi/liter would not be detected. In these

circumstances, the AEC's maximum allowed concentration of I-131 in the pooled milk samples collected at the milkshed could be reached and exceeded with contaminated milk from only 3 to 4 farms nearest the Plant. Moreover, because of its short half life of 8 days, I-131, at 5 pCi/liter of pooled milk, would not be detected if milk samples were held for 24 hours before being counted for their I-131 content. Let us accept, for the moment, the AEC notion that a child consuming a liter of milk containing 2.4 pCi of I-131 daily for a year would receive a cumulative thyroidal exposure dose of 15 mrem. Then, under the conditions described above, thyroidal exposures could be twice the maximum acceptable to the AEC without any awareness of this by those who were affected and without even the possibility of being alerted to this danger by milk sampling data. Taking this kind of information into account, it is difficult to accept Mr. Knuth's conclusion that "... we do not believe a significant risk to the public has existed ..."

WHY DO AEC ADMINISTRATORS DISREGARD REPORTS FROM THEIR TECHNICAL STAFF?

In his letter to Senator Proxmire, Mr. Knuth suggests that the applicable radiation protection guide is 80-100 pCi I-131/liter of milk. Assuming that a liter of milk is consumed daily, this level of radioactivity corresponds to an annual exposure dose to the thyroid of 500 mrem. Mr. Kruth refers to this level at a time when he, as the Director of Regulatory Operations, must know that the maximum concentration of I-131 in milk had previously been lowered to 2.4 pCi/liter, corresponding to an annual thyroidal dose of 15 mrem. Apparently, the AEC does not consider other pathways for radionuclide entry into the human body. For instance, radioactive gases, including radioiodines, could be inhaled. This means that there is the possibility of internal biological damage, even from the radio-active noble gases - Krypton and Xenon - and from Tritiated (radio-active) Water Vapor.

As suggested above, the permitted annual exposure dose of I-131 to the thyroid, 15 mrem, is itself open to serious question. One would like to know the basis of the assumptions, and their validity, used by the AEC to determine the apparent correspondence between a daily consumption of 1 liter of milk containing 2.4 pCi of I-131 per liter and the annual dose of 15 mrem. How has it been determined that this dose is tolerable, year after year? Obviously, similar questions are pertinent for Sr-90 and Cs-137 in milk with regard to their accumulation and effects (leukemias, cancers, etc.) in bone and in the soft tissues of the body. Then, too, what about other radionuclides, not only in milk, but in other foods as well and in drinking water?

The AEC claims that Nuclear Power Plants do not cause exposure doses to the surrounding population in excess of 1 mrem per year. Yet it permits radionuclide releases corresponding to an allowable exposure of 5 mrem/year, presumably on an "as low as practicable" basis. Still, in seeming contradiction even to this "standard", the thyroid of a child is "permitted" on annual exposure of 15 mrem. What is the point of the AEC setting standards if these are permitted to shift ever upward? If the technology of Nuclear Power is constantly improving, as industry spokesmen are continually fond of telling the public, why aren't these standards becoming more, rather than less restrictive? If the technical specifications for radionuclide emissions from Nuclear Power Plants are being tightened - as apparently claimed by the AEC - why isn't this reflected in lower "permitted" exposures? Why does the AEC's administrative staff conclude that there is no cause for worry, when reports from its technical staff clearly indicate repeated violations of AEC standards, non-compliance with monitoring procedures and lack of sufficient sensitivity in detection instrumentation to give adequate warning of environmental radionuclide levels? How can the AEC issue immediate denials of danger to the public from radionuclide releases in excess of permitted levels when the AEC knows perfectly well that such statements are meaningless, because -

(1) of the well-known delay of years or decades between subacute or chronic exposure and subsequent appearance of leukemias, cancers and other radiation-induced conditions; and
(2) it is practically impossible to prove that a particular cancer or other condition was caused by radiation/radioactivity rather than by some other non-radiological biological and/or environmental insult.

It would appear that the AEC plays with numbers and with words in order to hide from public view the real risks associated with Atomic Power Plants. When Congress gave the AEC preeminent responsibility for radiation/radioactivity, did they also give that agency freedom to sidestep their responsibility and pass it on to others - such as the utilities and the atomic industry? It seems reasonable to suppose that the AEC plays these games to promote their plans to dot the United States countryside with these technologically underdeveloped, dangerously faulty and basically still unproven devices.

SERIOUS GENERIC QUESTIONS RAISED BY THE WISCONSIN SITUATION

1. Is there a safe dose of radiation? NO. Even AEC (now the Nuclear Regulatory Commission, NRC, and Energy Research and Development Administration, ERDA) says "No level of exposure to radiation can be considered to be without risk" (U. S. Atomic Energy Commission, Docket No. RM-50-2, Public Rulemaking Hear-

ing on Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion "as Low as Practicable" for Radioactive Material in Light-Water-Cooled Nuclear Power Reactors, February 20, 1974).

2. Is natural background radiation safe? NO. This radiation, which seems to be increasing due to human nuclear activities, varies between 80 and 100 millirads (mr) per year. It is responsible for up to 10% of congenital defects due to gene mutations; 10% to 20% of the incidence rate of leukemias; 10% of all cancers, life-shortening and degradation of the quality of health because of increases in genetic diseases such as heart disease, diabetes, arthritis, etc.

(Linus Pauling, "Genetic and Somatic Effects of High Energy Radiation", Bull. of the Atomic Scientists, Sept. 1970; Nat. Acad. Sci., "The Effects on Populations of Exposure to Low Levels of Ionizing Radiation, Advisory Comm. on Biol. Effects of Ionizing Radiations, Nov. 1972.)

3. Is "low-level" radiation harmless? NO. The National Cancer Institute estimates that allergic children may develop leukemia with any added radiation (Irwin D. J. Bross, Director of Biostatistics, Roswell Park Memorial Institute, "Protecting the Public Against the Bio-effects of Radiation", 1973). Furthermore, there is new evidence suggesting that prolonged exposure to low-level radiation may be more harmful than periodic larger doses ("Nuclear Fission: The Biological Peril", The New York Times, May 23, 1974).

In Australia a survey of medical statistics indicated a correlation between an annual increase of 3 mr from Sr-90 and an increase in the incidence of leukemia , (Bruce J. Brown, "Atmospheric Nuclear Testing - A Survey of Medical Statistics in Australia", Science and Public Affairs, February 1974).

An increase in Sr-90 of only one picocurie (pCi) per liter of milk, assuming a consumption of one liter of milk daily for a year, may cause an increase of 1.29 infant deaths per 100,000 births (Lave, Lester B., Leinhardt, Samuel and Kaye, Martin B., July 1971, Working Paper No. 19-70-1, Carnegie Mellon University, Pittsburgh, Pa., "Low Level Radiation and United States Mortality"). And this increase in Sr-90 concentration in milk amounts to an annual dose of only 2.3 mr.

4. Does Wisconsin milk present a danger to consumers? IT MAY. Eau Claire milk, in 1973, contained an average of more than 10 pCi of Sr-90 per liter, about twice the national average (U. S. Environmental Protection Agency, "Radiation Data and Reports", 1973; Radiation Protection Section, Wisconsin Department of Health and Social Services, "Annual Radiation Monitoring Reports", 1973). For 10 pCi Sr-90/liter, and one liter of milk per day, the annual dose would be about 24.5 mr.

5. What is the radiation dose from Nuclear Power Plants? According to utilities, as low as 0.003 mr/yr. (Wisconsin Electric Power Company, "Nuclear Power", 1972); according to AEC, 1 mr/yr. However, in July 1973, the AEC announced an "as low as practicable" (ALAP) exposure from the nuclear power industry of 5 mr/yr. (U. S. AEC, WASH-1258, July 1973.) But for skin and thyroid doses, 5 mr/yr was found to be too low to be achieved technologically; therefore, the dose was raised to the "practicable" level of 15 mr/yr. If this dose was assumed to come from I-131 to a child's thyroid gland, the corresponding concentration of I-131 in milk would be 2.4 pCi/liter assuming a daily consumption of one liter of milk throughout the year (U.S. AEC, Regulatory Guide, 1.42, June 1973).

6. Are there food sources, other than milk, that can contribute to the annual radiation dose? YES. For I-131, there may be uptake from vegetables approximately equal to that from milk (Fed. Radiation Council, "Pathological Effects of Thyroid Irradiation", Advisory Comm. Div. of Med. Sci., Nat. Acad. Sci., Dec. 1966); Sr-90 may be present in milk and vegetables as well as in the bones of fish and of other animals; Cs-137 is found in the flesh of fish and animals, and may show biological concentration factors of 2000 or more (U.S. AEC, Docket No. RM-50-2, February 20, 1974; Nat. Acad. Sci., Nov. 1972; Wis. Elec. Power Co., PSAR); and all three of these radionuclides have been found in milk (Wisc. Dept. Health & Soc. Serv., July 1969 through June 1971). Cheese may contain up to 7 times as much radioactivity as an equal amount of milk, allowing for radionuclide half-life and the age of the cheese (Nat. Acad. Sci., Nov. 1972). Cranberries and soybeans have also been shown to be sources of Sr-90 and Cs-137 (U.S. Dept. HEW, "Radiological Health Data, 1962 and 1963).

7. What are the relationships between radionuclide concentrations and doses? For I-131, the Federal Radiation Council's "Radiation Protection Guide" (RPG) suggests, for children, that daily consumption of a liter of milk for one year, containing 80 pCi I-131/liter, would yield an annual dose to the thyroid of 500 mr. That is, 80 x 365 or 29,000 pCi of I-131 would yield a 500 mr-dose, or 58.4 pCi is equivalent to one mr annual dose - (Ltr. from D. F. Knuth, Director Regional Operations, U. S. AEC, to Senator William Proxmire, October 15, 1974). This concentration dose relationship for I-131 is also seen from the AEC limit of 15 mr/yr. thyroid dose, which corresponds to daily consumption of one liter of milk containing the suggested maximum concentration of 2.4 pCi of I-131 per liter (U. S. AEC Regulatory Guide 1.42, June 1973). Thus, 2.4 pCi/liter would amount to 876 pCi of I-131/yr. which is equivalent to an annual thyroid dose of 15 mr or 58.4 pCi/mr (see Table 1). For Sr-90, the concentration/dose relationship suggests an annual bone dose of 26 mr for a

concentration of 11.8 pCi/liter (U. S. EPA, ORP/SID 72-2, June 1971). It appears that 158.5 pCi of Sr-90 is equivalent to one mr annual dose (See Table II). The corresponding relationship for Cs-137 is 36,300 pCi/one mr annual dose.

- - - - - -

March 1975 .... LEAGUE AGAINST NUCLEAR DANGERS

Rt. 5, Box 171, Stevens Point, Wisconsin - 54481

- - - - - -

Mrs. Allen. We already have this knowledge about radiation risks. The NRC doesn't really need more data in that area. It needs strong decisions.

Mr. Turner. One point, Mrs. Allen, who monitors the radiation; NRC? Do they have their people out there monitoring?

Mrs. Allen. No. the NRC does not monitor. This is a very common misconception. The public assumes that the AEC is monitoring the radiation. When we approach the State agencies and ask them about monitoring radiation, they say it is not up to us. That has been preempted.

That is taken over by the AEC–NRC. When you approach the NRC, their response is we have no personnel in Virginia. That is not up to us. We set the standards. We make the rules of how much is acceptable or is "as low as practicable" as is the phrase, but it is up to the utility to do the monitoring.

So, again we have the utility monitoring itself. The actual radiation risk is left to the integrity of the utility. This is an exceedingly disturbing fact.

Senator Metcalf. Mrs. Allen, you are saying that there isn't any public, independent agency that is monitoring radio activity or radiation?

Mrs. Allen. As I understand it, there are monthly collections by the State agency.

Senator Metcalf. Spot checks?

Mrs. Allen. The State health department; yes. They check the shellfish in the area near Surry and they check the milk. Then they submit match samples to the AEC.

The last time that we talked with the health department, which was admittedly some months ago, they had never received any feedback on these matched samples from the AEC.

So the majority of radiation monitoring is left to the utility itself. This is the extraordinary point that is made by Dr. Lyon. He has researched this very carefully in the entire Wisconsin area, and then shows how he has taken his findings back to the AEC and tried to find out why proper iodine levels are not watched over around this plant that is operating in Wisconsin.

The difficulty is trying to find out who is in charge. The levels are set by the AEC, but the actual monitoring is done by the utility itself.

The levels themselves should be a matter of great concern because they are only kept as low as practicable and that phrase means the levels of radiation are what are practicable, technologically.

This does not mean what is desirable physiologically, but what is practicable technologically.

Secondly, major changes in that allowable amount of radiation are brought about almost always by outside agitation, not by concern about radiation risks within the NRC.

Senator Metcalf. Do any of these officials of the utilities live there in or adjacent to this plant?

Mrs. Allen. I am sorry; I didn't hear the question.

Senator METCALF. Do any of the officials of the utility live in or adjacent to the plant?

Mrs. ALLEN. I am sure they must. The major executives of the utility live in Richmond. I am sure they have to have people who live near the plants. But this is part of the response always when one raises this question of radioactive risk, is to say "we live near there, too. Obviously, we are confident."

Senator METCALF. You live or die for our utility.

Mrs. ALLEN. That is right. I would like to make one more point on this whole problem of allowable amounts of radiation. A quiet change has been made in the last few months that I think greatly increases the risk.

In 1973, I believe the summer of 1973, the regulation was that only 15 millirems per year were allowable per reactor site. So that meant that if at North Anna you have four reactors running, those have to run cleanly enough so that the total is 15 millirems.

That has been changed within the last few months so that the 15 millirem limits applies only per reactor. So it means now that the larger site you live near, the greater the risk.

Senator MERCALF. This is four reactors?

Mrs. ALLEN. That is right.

Senator METCALF. So it would be four times 15 millirems?

Mrs. ALLEN. Right.

Senator METCALF. So you would have four times the allowable limits?

Mrs. ALLEN. This is the way we read that. Yes. The question of cumulative radiation always has to be addressed if you get this 15 millirems steadily each year.

That is taken up in Dr. Lyon's paper.

Finally, to my last paragraph, to repeat, the NRC doesn't really need more data. It seems to us to need strong decisions.

Enough information regarding nuclear risk and continued malfunction—that is an area we could go into for hours, is the amount of malfunction, component error, personnel error, that are happening every day—exists today to justify a prudent regulatory decision to derate existing plans and delay future nuclear reactors.

According to the June 1975 Bulletin of the Atomic Scientists, nuclear industry spokesmen, themselves, believe "that a full and frank discussion of these issues"—these issues being the risks, the costs, the wastes, the reliability—"a full discussion of these issues would result in no further use of light-water fission reactors for generating electricity."

The coalition hopes that the work of this committee, with its very admirable concern for adequate and accurate information, will lead to just such a full and frank discussion of nuclear technology.

And I thank you very much for your invitation and for the opportunity to appear before you and I would gladly answer any questions if it didn't take too much of your next witness' time.

Senator METCALF. Did you let that mapping—how far is it from Washington?

Mrs. Allen. Seventy miles.

Senator Metcalf. You scared me to death.

Mrs. Allen. Good.

Senator Metcalf. I have no questions. I think you have raised a most significant and important question that certainly this committee and other committees in the Congress, including the Joint Committee on Atomic Energy, should investigate.

I know that every one of the members of this committee is going to be concerned and interested and involved in investigation.

I don't have any further questions. I have a lot of future questions, but they are matters that my staff can investigate, but maybe counsel has a question.

Mr. Turner. I have two, Mr. Chairman. Could you give the committee the benefit of your knowledge with respect to present conditions or events at North Anna and Surry that you feel bear out your original claim and concern?

Mrs. Allen. Yes, in terms of foundation conditions and the right to look at fundations before the construction began.

As I said in my testimony, the AEC adjective for the liquefaction-prone foundations at Surry was "suspect." We now know that there has been some concern about differential settling at Surry and that is currently under investigation.

I think that the NRC has not issued any report on that at the moment and does not see it as a major problem. Nevertheless, the settling beneath the Surry reactors is currently under study.

Mr. Turner. At North Anna, are there not preliminary indications of stress?

Mrs. Allen. Yes, at North Anna there is a real problem. Incidentally, both Surry and the North Anna problems are being considered for some kind of enforcement action by the NRC, as I understand it. But at North Anna, there has been extraordinary settling beneath the pumphouse which has to do with the cooling water for Units 1 and 2.

It was originally reported as being expectable amount of settling. Now in an AEC report, dated July 8, NRC report, dated July 8, it is reported that the amount of stress on the pipes there is beyond that predicted and, therefore, is a problem that is having to be studied further. So the condition of the site is still a problem, both at the pumphouse and in the reactor excavations themselves.

Mr. Turner. Assuming there is an injunction against further nuclear operation of these two plants at North Anna, what can be done with them? There is a $1 billion plant there. What can be done with it?

Mrs. Allen. I don't pretend to any great technological expertise, but we do know that there was a nuclear plant by the name of Pathfinder, which was converted from nuclear to coal, under the guidance of the AEC, because it evidently was a problem in nuclear operation itself.

Secondly, and perhaps of more significance in terms of how things have changed between the 1960's when these plants were planned and now is that the peak load demand in Virginia for the

year 1985 has dropped about 8,000 megawatts, which is the equivalent of eight nuclear power plants.

So we really do not need the amount of nuclear technology that was planned in the 60's for the 1970's and in the 1970's we are much more aware of the kind or risks involved than we were in the 1960's.

Senator METCALF. Thank you very much for calling this to our attention.

Mrs. ALLEN. Thank you for your very courteous attention.

Senator METCALF. I just can't tell you how concerned I know all of us are going to be on the basis of the information that you have presented here. I am just thinking of how we can best continue the investigation.

I think that I will immediately call it to the attention of the Joint Committee on Atomic Energy. I am certain that the people on the Atomic Energy Committee are aware of the dangers of nuclear construction on geological faults. There is enough unknown danger without going forward with these known things.

So thank you very much.

Mrs. ALLEN. You are very welcome. We commend your concern and once again we thank you very much for the opportunity.

Senator METCALF. I know that Mr. Turner and other members of my staff, both on the majority and minority sides, will be in communication with you. This is not the end of this investigation.

Mrs. ALLEN. Thank you, we will gladly share with you any of our records or materials that we can; thank you again.

Senator METCALF. Thank you very much.

[Other pertinent information referred to in the record follows:]

ATTACHMENT 1

CHRONOLOGY OF GEOLOGICAL CONCERN AT THE NORTH ANNA NUCLEAR POWER STATION
NAEC (Prepared by the North Anna Environmental Coalition)

1968.....Boringa at North Anna site reveal chlorite seam; "areas showing small movement noted" per 8/8/73 testimony of Joseph Fischer, geologist with Dames & Moore, Consulting Engineers in the Applied Earth Sciences. (Note: Dr. John Funkhouser, geologist at John Tyler Community College, says "There's a chlorite seam there because it's a fault.") DAILY PROGRESS 8/18/73

Jan. 13, 1969.....Dames & Moore: REPORT SITE ENVIRONMENTAL STUDIES FOR PROPOSED NORTH ANNA POWER STATION: "The site area is extensively jointed...cross joint set is often found near contacts between two rock types at the site...at times clay-filled as much as 2 inches...two sets of diagonal joints in direction of maximum shear.. ..usually smooth with some clay filling, and are slickensided in places...extensive but widely spaced..."

March 21, 1969.....VEPCO applies for Construction License for Units 1 & 2; also for a facilities permit.

May 8, 1969.....Dames & Moore: REPORT FOUNDATION STUDIES FOR PROPOSED NORTH ANNA POWER STATION: "...our investigation revealed occasional seams of weathered rock to significant depths below the surface of relatively fresh rock. We do not expect these seams to be thick enough to affect mat performance...However, it is recommended that the rock exposed at foundation level be carefully examined by an experienced geologist...

"Available evidence suggests that stability problems may exist at least in the south to southeast portions of the reactor cuts. Potentially unfavorable joint and rock conditions have been observed and could influence excavation stability..."

Several courses of action then suggested, with the following conclusion: "If this sequence is adopted, it will be necessary for an experienced engineering geologist to thoroughly and continually inspect the excavation as it progresses."

Sept. 18, 1969.....Letter from Peter Morris, Director, AEC Division of Reactor Licensing, to VEPCO, asking for more information regarding the known fault, 4½ miles from the North Anna site. "Have any earthquake epicenters been localized along this fault?" Mr. Morris also asks if new Dames & Moore data confirm previous seismic survey. (NAEC researcher could not find VEPCO's reply, perhaps because of rather informal filing system.)

Feb. 23, 1970.....visit to North Anna Unit 1 Excavation site by Dr. John Funkhouser, geologist with John Tyler Community College, who identified fault visible because of chlorite seam and mentioned fault to VEPCO personnel.

Feb. 27, 1970.....visit to the Virginia Division of Mineral Resources by Mr. John Briedis, Dames & Moore Project Geologist, identified on VDMR Interview Record as also representing VEPCO and Stone & Webster: "Mr. Briedis brought 6 samples of rock materials from the foundation of the nuclear power plant for our examination and mineral identification. These samples included biotite granite-

gneiss, epidotized biotite, granite gneiss, and serpentinized chlorite foliate with abundant slickensides...The chlorite rock, which occurs in thin concordant beds within the country rock, forms slip planes 50° to the S.E. that have caused the collapse of the side walls of the excavation currently being made."

March 10, 1970.....Return visit to VDMR by Mr. John Briedis. Interview record entitled "Mineralogy of faulted rocks which had caused landslides." Report incomplete--"Because of a breakdown in X-ray equipment, we were only able to analyse one sample, which was a chloritic slickenside sample."

March 19, 1970.....VDMR Report No. 553 with geological analysis by Dr. James L. Calver released to VEPCO; references made to "...weathered rock with slickenside: chlorite..."

March 23, 1970.....Visit to North Anna Unit 1 Excavation site by Dr. Bruce Goodwin, Chairman of Geology Department at the College of William and Mary, at the invitation of Dr. John Funkhouser, who wished to have a structural geologist confirm his fault determination at the site. So confirmed.

May 10, 1970.....Letter from VEPCO Vice-President Stanley Ragone to AEC Director of Reactor Licensing, Peter Morris, describing progress at the North Anna site: Excavation for Unit 1 reactor containment complete...Unit 2 progressing...Placement of porous concrete drain beds in excavations scheduled for mid-June... Exposed wall cuts to be gunited...Reinforcing steel to be placed in position in July...(Note--Construction License Hearings still 6 months away)

August 25, 1970.....Letter from Ragone to Morris requesting exemption to proceed to be granted by September 15, 1970.

Sept. 4, 1970.....Letter from AEC Harold Price to Ragone: Exemption granted for installation of portions that are finished below grade level. "Granting of exemption shall have no bearing on subsequent construction permit...Granting does not constitute approval of type or adequacy of method of installation." (NAEC note--Who is responsible for the quality control of work done during such a period?)

Nov. 23-25, 1970....Construction License Hearings on Units 1 & 2. NAEC researcher could find no discussion in the record of geological anomalies though Dames & Moore geologist Joseph Fischer present. It appears that D & M printed studies went into the record without questioning by the Atomic Safety and Licensing Board. In the bound edition of TESTIMONY FROM APPLICANT'S WITNESSES there is none from Fischer, though he is described in VEPCO's PROFESSIONAL QUALIFICATION OF WITNESSES.

March, 1971.....Construction License granted on Units 1 & 2 with Atomic Safety and Licensing Board commenting that the record showed "no unresolved questions about radiological safety." (NAEC note--AEC Attorney Kartalia told NAEC on Aug 8. 1973 that the fault is more a radiological problem than an environmental one.)

NAEC NORTH ANNA CHRONOLOGY. . . . . PAGE 3

Aug. 18, 1971.....Dames & Moore: REPORT ENVIRONMENTAL STUDIES FOR NORTH ANNA POWER STATION PROPOSED UNITS 3 & 4:
"Rock in the site area is extensively jointed...a set (of joints) trending approximately N 30° to 50° E and dipping approximately 30° SE often shows reverse shear movements. It is most frequent at or near hornblende gneiss contact...They are clay or chlorite filled, smooth, and show movements up to 1½ feet...Most shear movement in hornblende gneiss, indicating hornblende gneiss less competent that granite gneiss..."
Conclusion: "The site is apparently free of faulting and structural anomalies."
(NAEC recalls Mr. Fischer's stating at VEPCO's August 7, 1973 news conference that movement defined a fault.)

Oct. 1, 1971.....Dames & Moore: REPORT FOUNDATION INVESTIGATION NORTH ANNA POWER STATION PROPOSED UNITS 3 & 4:
"In view of extensive investigations made for Units 1 & 2, taking and testing of undisturbed samples were kept to a minimum... Parameters for 1 & 2 were evaluated and modified where necessary for 3 & 4...47 additional borings made..." Boring logs show several references to "highly fractured zones with chlorite coating."

March 15, 1972.....VEPCO ENVIRONMENTAL SUPPLEMENT--Vol. I--Units 1-4:
"Surface mapping, boring data and the excavation for Units 1 & 2 all indicate continuity of strata...Faulting at the site is neither known nor is it suspected. Site conditions reveal that all safety Class I atructures will be founded on hard crystalline rock or on dense residual soil..."

Vol. II of the same ENVIRONMENTAL SUPPLEMENT lists among geologists interviewed regarding Units 3 & 4 Dr. Stephen Clement of the College of William and Mary. It is important to note that Dr. Clement accompanied Dr. Bruce Goodwin and Dr. John Funkhouser to the North Anna site in March of 1970 when Dr. Funkhouser's fault identification in the Unit 1 excavation was confirmed.

Jan. 3 - April 28, 1973.....Excavation for Unit 3; displacement noted.

March 9 - June 15, 1973.....Excavation for Unit 4; displacement noted.

April 15, 1973.....VEPCO staff geologist reported fault phenomenon.

April 24, 1973.....VEPCO initiated fault study.

April 30, 1973.....Notarized letter from VEPCO's Ragone accompanying FINAL SAFETY ANALYSIS REPORT ON UNITS 1 & 2 which states "Faulting at this site is neither known nor is it suspected."

May 7 - 10, 1973....Construction License Hearings on Units 3 & 4; no mention of geological problems to Atomic Safety & Licensing Board.

May 17, 1973.....Record of Construction License Hearings closed.
May 17, 1973.....AEC received VEPCO's notice of fault at the site.

Aug. 4, 1973.....North Anna Environmental Coalition informed the public of the fault "running through all 4 excavations" at the North Anna Power Station site.

NAEC Chronology. . . . . .Page 4
(Note: There is some overlap in dates with the previous page because when page 3 was written, NAEC was unaware of the AEC affidavit of July 31, 1973. Other information is added in the interest of a more complete chronology.)

May 29, 1973.....NAEC showed film at Louisa High School: "HOW SAFE ARE AMERICA'S ATOMIC REACTORS?" North Anna worker in attendance described drilling through rock and hitting clay at the site and wondered if such a situation represented an earthquake hazard.

July 24, 1973.....NAEC received call from responsible Louisa citizen, confirming the major geological nature of problems at the power station site, and urging NAEC to pursue inquiries with AEC and others.

July 25, 1973.....NAEC called AEC Regulatory Staff Counsel who stated that a fault had been discovered to run through "all four excavations at the reactor site. (This fault is described in an AEC memorandum dated June 21, 1973.)

Note: At this point, the public still has no knowledge of the site problem; neither does the Atomic Safety and Licensing Board who just 2 months earlier heard Construction License testimony for Units 3 & 4.

July 31, 1973.....The AEC Regulatory Staff submitted to the Atomic Safety and Licensing Board an affidavit from its geologist, A. T. Cardone, stating that it is his opinion that the safety question raised by the discovery of the fault can be resolved on the basis of VEPCO's report to be submitted August 15, 1973.

August 4, 1973.....NAEC releaaed the story of the fault to the press.

August 8, 1973.....VEPCO held a major televised news conference in Richmond at which Cardone's affidavit was read and where all but one of a panel of geologists attested to the nuclear safety of the site. (NAEC attended and questioned this assurance, based on zero AEC experience.)

August 22, 1973.....NAEC asked the Atomic Safety and Licensing Board to reopen Construction License Records on the 4 North Anna Units and to convene a public hearing in Louisa on the matter. NAEC also submitted evidence in support of its contention that VEPCO had not acted in good faith.

August 23, 1973.....The Atomic Safety and Licensing Board asked VEPCO and the AEC Regulatory Staff for "views on an appropriate mode of dealing with the question" of the Cardone affidavit.

August 31, 1973.....VEPCO replied that it had submitted its DAMES & MOORE report which would allow the AEC Staff to "resolve any safety questions involving geologic conditions at the site."

August 31, 1973.....The AEC Staff replied that it was reviewing the D & M Report.

September 4, 1973...NAEC wrote to Mr. Robert L. Ferguson, AEC Project Manager for North Anna, to request an AEC investigation of the site that would go far beyond the Dames & Moore report to include disinterested scientists who were expert in nuclear plant geological requirements.

September 5, 1973...NAEC wrote to AEC Regulatory Staff Counsel David Kartalia to repeat the above request. NAEC also expressed shock that the D & M report treated the possibility of increased seismicity from an impoundment with a 2-paragraph dismissal.

September 11, 1973..NAEC sent a formal letter to the AEC Regulatory Staff requesting that no construction licenses be granted for North Anna Units 3 & 4 until the Board had heard and questioned expert witnesses on the implications of the fault and until the Board had studied the results of state and federal investigations; further, NAEC requested that VEPCO's construction licenses for Units 1 & 2 be revoked for "material false statements" about faulting at the site.

September 21, 1973..Mr. Robert L. Ferguson, AEC Project Manager for North Anna, sent VEPCO an 8-page "Request for Additional Information," including questions on ground water problems and the risks of increased seismicity from an impoundment.

September 27, 1973..THE WASHINGTON POST published Hal Willard's story on the North Anna fault: "The 'Devil' and the Reactor," which created a furore in the Congressional Joint Committee on Atomic Energy. (Mr. Willard believes that without NAEC there would have been no AEC investigation at North Anna.)

September 29, 1973..Atomic Committee on Reactor Safeguards (ACRS) visited the North Anna site.

October 17, 1973....The Atomic Energy Commission ordered VEPCO to show cause why construction on its North Anna Units 1 & 2 should not be stopped until completion of an AEC investigation of a geologic fault at the site; AEC also requested an evidentiary hearing on geologic faults in Units 3 & 4.

Sept. 19 - Oct. 31, 1973, and Jan. 17 - Feb. 27, 1974...AEC Investigation of fault info
November 6, 1973.....VEPCO requested a hearing in response to Show Cause order
November 8, 1973.....Meeting in Fredericksburg to orient new ASLB Chairman Farmakides
November 26, 1973.....NAEC repeated request to AEC for independent investigation; also asked no cementing of excavations pending completion of public hearings.
December 22, 1973.....NAEC received AEC notice that Messrs. Farmakides, Chanlett, and Briggs given authority to rule on VEPCO's request for hearing.
December 29, 1973.....BBC visit for film re North Anna

January 24, 1974.....NAEC filed petition to intervene in Show Cause Hearing
March 20 - April 4, 1974...Show Cause Hearing in Louisa, Virginia
June 27, 1974.....Show Cause Board ruled site safe
November 8, 1974.....Show Cause ruling appealed to AEC Appeals Board by NAEC
January 28, 1975.....NAEC appeal denied
January 29/30, 1975...Hearing on Concealment issue of "material false statements"
April 4, 1975.....VEPCO convicted of 12 "material false statements"
May 28/29, 1975.....Hearing to determine penalty; NRC recommends $60,000 fine
June 11, 1975.....NAEC files "Petition for Review of a Decision of the Atomic Safety and Licensing Appeal Board" with U. S. Court of Appeals for the District of Columbia Circuit

NORTH ANNA ENVIRONMENTAL COALITION

P.O. BOX 3951 (804)282-8817
CHARLOTTESVILLE, VIRGINIA 22903
(703) 832-3983 or (804)293-6039

PROGRESS REPORT.....NOVEMBER, 1973*

NAEC COMMUNICATIONS WITH AND RESPONSES FROM VIRGINIA STATE AGENCIES REGARDING PUBLIC SAFETY

State Water Control Board (SWCB)

Relevant background information: Minute 5---Amendments to Water Quality Standards adopted April 24, 1973:

A. All State waters shall be maintained at such quality as will permit all reasonable, beneficial uses...including game fish...

B. All State waters shall be free from substances...which will interfere directly or indirectly with reasonable, beneficial uses...or which are inimical or harmful...Specific substances to be controlled include..toxic substances...

SWCB "Notice of Hearing" on 401 Certificate for VEPCO's North Anna Nuclear Power Station stated that such a certificate would be issued only after a review demonstrates that VEPCO's discharge of treated cooling water...

3. will assure protection of public water supplies...protection of wildlife, and allow recreational activities in and on the water...

SWCB's "Fact Sheet" of May 15, 1973 on VEPCO's 401 Application to "discharge treated cooling water into the waters of Virginia" stated that the receiving waters in Lake Anna are classified as Class III-A waters and are to be suitable

"for public or municipal water supply, secondary contact recreation, propagation of aquatic life, and other beneficial uses..."

June 19, 1973.....SWCB HEARING ON NORTH ANNA/VEPCO 401 Certificate: NAEC presented petition urging SWCB to act so as to insure that effluent from NAPS would not be detrimental to Lake Anna; NAEC also raised questions regarding radioactive ("toxic substances") and thermal pollution, adequate monitoring, and VEPCO credibility in the light of the Surry fine.

June 20, 1973.....NAEC mailed request to SWCB and staff to reconsider its 6/19 abdication of radioactive pollutant responsibility to the AEC and act to enforce AEC standards within Virginia.

August 17, 1973.....NAEC wrote SWCB Executive Secretary Eugene Jensen asking delay in final balloting on 401 certificate for NAPS plus reopening of June 19 hearing to consider important facts known but not revealed by VEPCO at that time: the existence of a fault beneath all 4 reactors and the seepages of ground water through the chlorite seam therein. Geologists had raised the possibility of ground water contamination resulting from a reactor leak.

August 22 and 24.....Telegram requests for delay and study to SWCB and Jensen.

August 29, 1973.....Letter from Jensen to NAEC President William Warren stating that after the Board considered NAEC's letter, it voted to grant the 401 Certificate which deals "solely with limitations on the discharge of waste heat from the steam turbines..."

NAEC Note: Compare this statement with SWCB's "Notice of Hearing" and "Fact Sheet" above.

* Prepared at the request of CONGRESS WATCH, a Nader organization in Washington, D.C.

September 6, 1973....Letter from Jensen to Senator Dalton who had inquired on NAEC's behalf regarding the 401 certificates. Rather than commenting upon waste heat, Mr. Jensen writes: "The certificates approved the construction and operation of Units 1 & 2 and the construction of Units 3 & 4." To Senator Dalton, he mailed the certificates, and Senator Dalton kindly forwarded copies to NAEC.

September 24, 1973...Letter from Jensen to Senator Dalton: "At the September 17-18 Board meeting the Attorney General's Office reported to the Board that site characteristics of the VEPCO North Anna Power Station are inexorably linked to reactor safety and, therefore, are totally within the purview of the Atomic Energy Commission..."

September 13 and October 1, 1973...further correspondence from NAEC to SWCB asking that they inform the Coalition regarding ultimate protection of Virginia waters from toxic substances.

State Department of Emergency Services (SDES)

Relevant background information: On page 13-3 of AEC's SAFETY EVALUATION OF THE NORTH ANNA POWER STATION UNITS 3 & 4, issued December 29, 1972, is a statement that VEPCO will have an emergency plan for North Anna similar to that submitted for the Surry Unit 1 & 2 Operating License that contains arrangements with Federal and State authorities.

July 8, 1973.... ....NAEC wrote to SDES Director Thomas Credle, requesting a copy of the Surry emergency plan; also requested information regarding State plans for handling highway accidents involving radioactivity.

July 25, 1973.....NAEC called SDES to inquire why letter had not been answered; NAEC told that SDES awaiting copy of revised plan. NAEC reiterated request for original referred to in 12/29/72 Evaluation.

July 26, 1973.....Charles Sawtelle of SDES returned NAEC call; discussion of who has emergency responsibility--answer not clear--largely VEPCO with SDES "coordinating." Knows nothing of personnel training.

August 3, 1973.....SDES Director Credle called NAEC; said that in evacuation local goverement has responsibility, "supported by this office"; displeased because VEPCO originally left out local government; must be partnership with Health Department people on nuclear problems, and Civil Defense on movement.

August 7, 1973.....NAEC visited SDES office, spoke with Mr. Sawtelle who called VEPCO regarding Surry plan requested by NAEC July 8; mailed by VEPCO to NAEC August 8, 1973

October 1, 1973.....NAEC wrote Mr. Credle to inquire status of North Anna Emergency Plan in light of pending operating license hearing.

October 23 1973.....NAEC repeated request for information.

Note: NAEC has never received written communication of any kind from SDES. (Bulletin--Nov. 12--Radio just announced Credle's resignation to become Federal Disaster Assistance Administrator.)

State Air Pollution Control Board (SAPCB)

October 1, 1973.....NAEC wrote SAPCB to inquire their role and responsibility in protecting Virginia air from radioactive effluents.

October 18, 1973.....SAPCB answer: "...the Bureau of Radiological Health of the State Department of Health has for some time had a capability in radiation surveillance...Our Board has no radiation monitoring equipment, has no specialists trained in this field and does no day-to-day work in it. The Health Department Bureau has such equipment and has the experts. We receive its reports. Our staff meteorologist is working with one of the Bureau's people on development of one particular surveillance project for the North Anna plant on milk.....We have no (radiation) standards. The State Board of Health adopted regulations some time ago in compliance with Atomic Energy Commission regulations."

State Department of Health

July 9, 1973.....NAEC wrote Dr. M. I. Shanholtz, State Health Commissioner, to request descriptions of Surry and North Anna radiological monitoring programs, training programs for radiological emergencies, names of staff members involved in the foregoing, and names of liaison personnel between Health Department and VEPCO/AEC.

July 25, 1973.....NAEC called to request answer to above letter.

July 27, 1973.....Dr. Shanholtz's letter received; referred NAEC to Mr. Bryce Schofield, Director of the Bureau of Industrial Hygiene, Dr. Phillip Walton of the Medical College of Virginia Radiation Safety Office, and said that Virginia State Police would contact his department's Radiological Health Section and Emergency Specialists throughout the state. (Note: No descriptions of monitoring or training programs included.)

August 1, 1973.....NAEC called MCV's Dr. Walton who said that plans to date have nothing to do with North Anna; Dr. Walton is a physicist; says that list of telephone numbers has recently been updated.

August 1, 1973.....NAEC called local state police who knew nothing of radiation procedures; called Appomattox who gave the officer two telephone numbers to call in the event of an emergency. (Note: No knowledge of radioactive shipments of truck markings.)

October 1, 1973.....NAEC wrote Dr. Shanholtz again for information regarding Radiological monitoring at Surry and North Anna, emergency training programs, names of Emergency Specialists, credentials of B. Schofield.

October 5, 1973.....Dr. Shanholtz sent none of the specific information requested but commented "we think our existing programs are sound."

State Corporation Commission (SCC)

Relevant background information: AEC's FINAL ENVIRONMENTAL IMPACT STATEMENT, page 1-5, lists the State Corporation Commission as having granted VEPCO "certificates of convenience and necessity" for North Anna Power Station in 1970.

October 1,8,1973.....NAEC sent letters of inquiry to SCC re certificate status.
October 24, 1973.....SCC attorney told NAEC neither letter ever received; NAEC resent letters by certified mail.

State Corporation Commission (cont.)

November 11, 1973.....NAEC received partial answer to questions posed in letters of October 3 and 4; SCC's answer attached to this report. Burden of its is that certificates were granted to VEPCO before environmental legislation was passed and that permission covered all 4 units. NAEC plans to resubmit questions which were not covered.

State Division of Parks

Relevant background information: AEC's FINAL ENVIRONMENTAL IMPACT STATEMENT on the North Anna Power Station, issued in December, 1972, contains letters from this department raising questions about public safety at the planned Lake Anna recreational facility.

October 1, 1973.....Virginia Commission of Outdoor Recreation released news story that ½-million dollars of State money was about to be spent to purchase shore-line property for a park at Lake Anna.

October 3, 1973.....NAEC called Division of Parks to see if their safety questions to AEC had ever been answered: no, never.

October 9, 1973.....NAEC wrote Division of Parks to inquire formally how such land purchase could be justified without safety assurances and with the knowledge that a rural site had been chosen to avoid large numbers of people that might be drawn to a park.

October 16, 1973.....Parks Commissioner Bolen replied that park siting criteria have nothing to do with VEPCO plant siting criteria. Determinants are economy, shoreline, and minimal drawdown.

October 23, 1973.....NAEC issued news release objecting to the dangerous illogic of the foregoing.

State Office of the Attorney General

Since July 4, 1973, NAEC has been in varying degrees of communication with the office of Andrew Miller, Virginia's Attorney General. We asked his support of our request for re-opened hearings on North Anna to enter the matter of the fault. He deferred such action, pending the outcome of his requested investigation by the Virginia State Geologist.

After repeated requests for information regarding State responsibility for toxic substances, NAEC received the attached letter which, as expected, stresses AEC responsibility for all such radiological problems with the exception of monitoring by the State Board of Health--from whom we have been unable to get any specific monitoring information despite several attempts.

State Office of the Governor

The Governor has never answered any NAEC letter directly but delegates polite non-committal answers to the Secretary of Commerce and Resources.

To date, reporters have been unable to get any response to Dr. Lapp's call that the Governor appoint an independent commission to study the fault situation at North Anna.

ATTACHMENT 2

CHRONOLOGY RELATED TO NORTH ANNA POWER STATION UNIT #1 EXCAVATION--FEBRUARY-MARCH, 1970
(Information taken from AEC Investigation materials unless otherwise indicated)

Major Personnel Involved:

HERBERT L. ENGLEMAN--Liaison man between construction people, STONE & WEBSTER, and the VEPCO headquarters..."Mr. VEPCO" on the project...in charge at the site; "I attempted to stay abreast of what was going on, both at the dam and at the powerhouse." Official title: Resident Engineer.

ROBERT J. HENRY--STONE & WEBSTER geologist on the North Anna site; responsible for foundation investigation and foundation approval.

JOHN BRIEDIS--STONE & WEBSTER geologist in Boston in 1970; in 1968 had been Project Geologist at North Anna for DAMES & MOORE.

DAVID P. McKITTRICK--STONE & WEBSTER lead geotechnical engineer for North Anna project; based in Boston.

WILLIAM F. SWIGER--STONE & WEBSTER civil engineer in Boston.

Significant Events:

Early February, 1970....Rock slide and "precarious joint system" in Unit 1 excavation reported by Henry at North Anna to McKittrick in Boston.

February 4, 1970.....McKittrick informed Briedis of North Anna problems.

February 5, 1970.....McKittrick and Briedis visited the North Anna site. Lunar cracks noted by project personnel and McKittrick at Elev. 270...Rock bolt anchorage retained although steel bearing plates deformed.

February 7, 1970.....Drilling pattern laid out and shot in an effort to stabilize the slope; apparent following blasting that bench, Elev. 246, could not be retained; drag line excavation to stable bedding plane.

Middle February, 1970...Clean-up operations and excavation of Lift # 3 reveal chlorite seam.

February 19, 1970... Visit by AEC inspectors who noted "unstable strata which allowed up to slide into hole...rock bolts to stabilize

February 23, 1970.....Visit to Unit 1 excavation by Dr. John Funkhouser, geologist with John Tyler Community College; Dr. Funkhouser told his guide, VEPCO Resident Engineer Engleman, that he had a "very unusual geologic feature" and asked permission to "return with another geologist." per 1/21/75 phone call to NRC, Atlanta

(NAEC note: Mr. Engleman knew Dr. Funkhouser's profession. In the light of the excavation difficulties and the Boston visits to consult thereon, it would seem a reasonable expectation that he convey Dr. Funkhouser's remarks to site geologist Henry and visiting Boston Stone & Webster consultants.)

February 23-26, 1970....Briedis returns to North Anna to thoroughly map Unit 1.

February 25, 1970.....Swiger arrives from Boston for "in-depth field investigation" of the slide area; discussed chlorite seam with Henry and Briedis in great detail; all consider possibility of faulting but decide chlorite zone feature does "not represent fault problem."

[1] See article in Washington Post, Sept. 12, 1975, p. —.

February 27, 1970.....Briedis takes 6 rock samples from Unit 1 to the Virginia Division of Mineral Resources in Charlottesville for mineral identification and comments on the origin of the geologic structures.

"...Messrs. Conley, Good, and Cathright orally advised Mr. John Briedis that the slickensides, cataclasts and chlorite in the rock samples from the site presented to them for mineral identification may be indicative of a fault."

(per sworn statement of James L. Calver, Commissioner of Mineral Resources and State Geologist of Virginia, made on March 10, 1974, in response to Interrogatories of the North Anna Environmental Coalition)

March 3, 1970.....Henry writes the following: "At this location the failure has been controlled by, and is a manifestation of, a biotite rich layer which has been altered to chlorite and severely weathered...Country rock immediately overlying the biotite bed appears to be somewhat more siliceous than the surrounding bedrock and contains some disseminated sulphides...Bedrock immediately underlying the biotite zone is a fresh coarse grained granite gneiss rich in orthoclase...The effects of a continuation of similar conditions through Unit #2 should be considered prior to excavation."

March 10, 1970.....Briedis returns to VDMR; Interview Record entitled "Mineralogy of faulted rocks which had caused landslides."

March 11, 1970.....Stone & Webster send VEPCO's Crutchfield 4 copies of internal letter on Rock Support and Reinforcement measures necessary in North Anna Unit 1 "to achieve stability." Typical statement from the 3-page letter: "The block of rock formed by these cracks and the chlorite seam is a threat to the excavation and should be removed."

March 23, 1970.....Dr. Funkhouser returns to North Anna Unit 1 excavation, bringing Dr. Bruce Goodwin, Chairman of the Geology Department at the College of William and Mary, his colleague Dr. Stephen Clement, and students Donald O'Donahue and Joseph Terrell (the latter now employed by VEPCO).

Dr. Goodwin is confident that Mr. Engleman's attention was called to the fault. "We considered it a large scale fault at that time...We mentioned the extreme amount of fracturing in the fault...We mentioned that that is a beautiful example of a fault...We were all sort of pointing at it and running up at it and grabbing samples of it...I believe we expressed some concern as to whether this was a good thing to have in any kind of foundation."

Dr. Clement is positive that the fault was pointed out to Mr. Engleman. "I felt that he didn't want to talk about it. I had a feeling that he kind of wished we would go away...I had a feeling that he had a moderate knowledge of rock types... I believe Goodwin, Funkhouser and I spoke about things like, 'Doesn't the presence of that fault bother you in this project?'...I think we asked him a few questions about engineering practices, about perhaps his rock bolting or stopping the water flow along the fault...we assumed that geologists were being consulted."

March 20, 1970 (cont.)..Dr. Funkhouser brings structural geologists to confirm fault diagnosis of "unusual geologic feature" he viewed Feb. 23,'70.

Dr. Funkhouser recalls asking Mr. Engleman if he realized that the feature was a major fault. "Mr. Englemandid not seem to have much knowledge of geology except that he had heard of faults...we eagerly spoke of a fault in our conversations...the engineer visibly cringed every time we mentioned the word... I assumed that he would immediately report this to his superiors and apparently he did." (The next several pages of Dr. Funkhouser's deposition are deleted per his request out of consideration of the current VEPCO employment of his former student, Terrell.)

Donald O'Donohue remembers Dr. Goodwin saying to Engleman "That's a beautiful fault you have there" and Engleman's replying "What fault?" as though he were surprised to hear about it. He believes the foreman asked if there was any danger the fault would move...O'Donohue remembers the discussion between Goodwin and Engleman because of the surprise in the man's voice. "It seemed ridiculous to O'Donohue that he wouldn't have known of the fault, or should have known about it, since he was in charge of construction."

Mr. Engleman recalls a "noticeable movement in the earth, and they took this portion of the side of the excavation off above the chlorite seam...It was perhaps done shortly before I got there."

(NAEC note: Mr. Engleman was on duty at the site from December, 1969 through September, 1970. Removal of material around the seam was done in February, 1970.)

Regarding his own reactions, Engleman says "I don't know that had he mentioned that there was a fault there whether it would have bothered me one way or the other. I'm not a geologist and I'm still hazy on what a fault is myself." Engleman can't recall any discussions with Stone & Webster site geologist Henry, nor can he remember the purpose of the Stone & Webster Geologists' visits from Boston. He does not remember who from VEPCO was involved in the resolution of the rock-slide problem, nor who from VEPCO approved the geologists' visits from the Virginia colleges...He saw nothing "of significance in the discussion"

(NAEC note: In the 35 double-spaced pages of Mr. Engloman's deposition to the Atomic Energy Commission, there are at least 41 instances of memory failure.)

Mr. Engleman was "in charge of the excavation site."

He reported to VEPCO's J. B. Dischinger of the Power Production Department. Dischinger required no "periodic written reports" from Engleman on the billion-dollar North Anna project, and has signed a statement confirming that Engleman made no report "concerning expressed concerns by anyone regarding a geologic fault at the site." W.H. Wills, Dischinger's superior, confirms the lack of any records on suspected faulting at the North Anna site.

(NAEC note: Incredible!)

NORTH ANNA ENVIRONMENTAL COALITION

P.O. BOX 3951 (804)282-8817
CHARLOTTESVILLE, VIRGINIA 22903
(703) 832-3983 or (804)293-6039

1970 CHRONOLOGY OF EVENTS AT NUCLEAR EXCAVATION RAISES SERIOUS QUESTIONS & DOUBTS IN PUBLIC MIND

1. If VEPCO did know of faulting and failed to report it, what trust can be put in other VEPCO safety statements and actions?

2. If VEPCO did not know of faulting--so readily apparent to independent geologists--what trust can be put in VEPCO competence?

3. In the light of wall collapse and multiple problems at the Unit 1 excavation site in 1970, how could VEPCO have failed to know that faulting was under consideration in connection with the chlorite seam?

4. How could VEPCO's Resident Engineer have been oblivious to the implications of the rock-slide and the sudden rush of visiting consultants?

5. Is it possible that VEPCO's Resident Engineer--with 24 years' experience--could be ignorant of the term fault, a term familiar to most laymen?

6. Is it believable in terms of sound business practice that VEPCO would launch a billion-dollar nuclear construction project in Louisa and not have a written report system with its representative at the site?

7. Who in the VEPCO hierarchy gave permission to proceed with the project after VEPCO learned of the stability problems arising from the chlorite seam?

8. Was there consultation with the AEC's North Anna Project Manager?

9. What was the extent of the AEC's knowledge and responsiblity at the site in 1970?

10. Why has the AEC's investigation of 1970 conditions surrounding site knowledge been so grudging and slow?

11. Why has the AEC put out a shoddy piece of investigative work 3/25/74 that makes no attempt to derive conclusions from evidence?

12. Where can the public look for protection if the AEC Regulatory Staff assists utility deception?

13. Can the public look to the Advisory Committee on Reactor Safeguards?

(Attached: CHRONOLOGY RELATED TO NORTH ANNA POWER STATION UNIT #1 EXCAVATION: FEBRUARY-MARCH, 1970)

ATTACHMENT 3

For release on April 11, 1974

NORTH ANNA ENVIRONMENTAL COALITION

P.O. BOX 3951 (804)282-8817
CHARLOTTESVILLE, VIRGINIA 22903
(703) 832-3983 or (804)293-6039

NAEC CALLS AEC INVESTIGATION REPORT "FRAUDULENT"

At a meeting today of the Advisory Committee on Reactor Safeguards, the North Anna Environmental Coalition charged the AEC with publishing a fraudulent report. The 2-paragraph "Summary of Facts" in the Commission's Investigation Report (I.R.) 3/25/74 of allegedly clears VEPCO/charges that the utility knew or suspected faulting at the North Anna Nuclear Power Station site in 1970--3 years before VEPCO reported the geologic anomaly to the AEC.

Such a conclusion is spurious, says a Coalition spokesman. Not only is it unsupported by the body of the report; it is given the lie by depositions collected by the AEC's own investigators. William F. Swiger, consulting engineer for VEPCO's constructor, told AEC that faulting under the North Anna dam was reported to VEPCO as early as 1969. That was fully a year before the visit by academic geologists whose fault diagnosis had prompted the original Coalition charges.

The 3 Virginia professors of geology also gave depositions to the AEC stating that in March of 1970 they had clearly and dramatically identified the faulting in the Unit 1 excavation to VEPCO's Resident Engineer, Mr. H. L. Engleman. Mr. Engleman was "in charge" of the North Anna site and responsible for liaison with VEPCO's Richmond headquarters.

Virginia's State Geologist has signed a sworn statement that a geologist representing VEPCO's constructor was alerted to possible faulting by three staff members of the Virginia Division of Mineral Resources on February 27, 1970.

A "SLOPPY FRAUD"

"Not only is the report a fraud--it's a sloppy fraud," commented one Coalition member, "compiled in a piece-meal fashion." The investigation was supposedly begun by the AEC in August of 1973 when the NAEC first made its charges. "If you read it carefully, you will see that 14 of the 23 people quoted were hastily reached in late January and February of 1974, after the Coalition complained about half-hearted investigation efforts and blatant omission of the Virginia Division of Mineral Resources. Its absolution of VEPCO is unrelated to reality." (See attached NAEC CRITIQUE OF AEC INVESTIGATION: EVIDENCE VS. CONCLUSIONS.)

NAEC Critique of AEC Investigation: Evidence vs. Conclusions

The CAPITALIZED STATEMENTS below are taken directly from "Summary of Facts," page 2 of the Investigation Report of the Directorate of Regulatory Operations (AEC) on the matter of VEPCO's early knowledge of faulting or suspected faulting at the North Anna Power Station. The investigation was made in response to charges by the North Anna Environmental Coalition that VEPCO knew of faulting at the site least as early as 1970 but did not report it to the Atomic Energy Commission until May of 1973.

Indented beneath the CAPITALIZED STATEMENTS are quotations from other parts of that same Investigation Report, depositions made to AEC counsel in its preparation, or reports submitted to the AEC at an earlier date. The North Anna Environmental Coalition believes that indented statements and quotations support NAEC's claim that AEC's "Summary of Facts" is not supported by evidence. Rather, in it the AEC presents unsupported spurious conclusions which are neither explained nor substantiated.

AN INVESTIGATION, WHICH HAS INCLUDED AN INTERROGATION OF THE PRINCIPALS CONCERNED AND OF AN EXAMINATION OF ALL PERTINENT RECORDS, HAS FOUND NO FACTUAL EVIDENCE THAT NOTICE OF A FAULT WAS RECEIVED BY VEPCO IN 1970.

> "Dr. Goodwin (Chairman of Geology Department at College of William & Mary) said to the construction man (VEPCO's Resident Engineer H. L. Engleman) something about 'That's a beautiful fault you have there.' The reason O'Donohue remembers this is because this foreman said, 'What fault?' as though he were surprised to hear about it." I.R. p.23

> "They were met by the official (VEPCO's Engleman) and they talked to him about the fault...Clement (Stephen C., Geology Professor at College of William & Mary) is sure they spoke about the fault and pointed it out and asked him if he weren't worried about it...He believes Goodwin, Funkhouser, and he spoke about things like 'Doesn't the presence of that fault bother you in this project?'...He is positive that the fault was pointed out to the official." I.R. p.8

> "They (Doctors Goodwin, Clement, Funkhouser) all readily agreed after an examination of the rock that there was a fault...they definitely pointed out to Engleman the fault which they had all agreed on...Engleman was almost incredulous, yet he was hearing it from all three.." I.R. p.7

IT HAS FOUND NO INDICATION THAT GEOLOGISTS EMPLOYED TO SURVEY THE SITE FOR VEPCO HAD CONCLUDED THAT A FAULT WAS PRESENT, OR SUSPECTED OF BEING PRESENT, PRIOR TO APRIL, 1973.

> "On February 27, 1970, Messrs. Conley, Good and Gathright (geologists for the Virginia Division of Mineral Resources) orally advised Mr. John Briddle (geologist for Stone & Webster, VEPCO's constructor) that the slickensides presented to them for mineral identification may be indicative of a fault." --3/10/74 sworn statement of State Geologist

> William F. Swiger, Stone & Webster consulting engineer "observed a chlorite seam... He recalled that they gave consideration to the possible interpretation of this feature as a fault (he and Henry)." I.R. p.14

Critique of Investigation Report. . . . . Page 2

WS: "There is a small fault on the mapping on the north side of the river which is under the dam..."
"A small fault which I suppose you would classify as a geologic anomaly, is that correct?"
WS: "Yes."
"Was the fault reported to VEPCO, to your knowledge?"
WS: "It's identified on the geologic map." --Swiger deposition, p.32,34

(NAEC Note: Said geologic map is in a Stone & Webster report dated February 6, 1969. Per Show Cause Hearing testimony, AEC's first knowledge of faulting under the North Anna dam was the above quoted Swiger deposition 10/31/73. It has since been learned that there are at least 12 faults under the dam, 2 going toward the reactors, none reported until 1973.)

"Did you consider at that time (2/70 the possibility that this might be a fault?"
RH: "...John Briedis and Bill Swiger--we all gave it consideration...looking at the chlorite seam, it's one of the first things that anybody would consider as a geologist..." --R. J. Henry deposition, p.19

"Did you inform anyone else you were considering faulting?"
JB: "Probably McKittrick." --John Briedis deposition, p.42

IT HAS FOUND NO EVIDENCE THAT VEPCO SHOULD HAVE INFERRED FROM ANY STUDIES OR PRIOR SURVEYS OR COMMISSIONED GEOLOGISTS' REPORTS THAT A FAULT WAS PRESENT.

"The site area is extensively jointed...cross joint set is often found near contacts between two rock types...two sets of diagonal joints in direction of maximum shear...slickenslided in places..."
--Dames & Moore Env. Studies 1/13/69, I.R. Ex.A

"Potentially unfavorable rock and joint conditions have been observed and could influence excavation stability..."
--Dames & Moore Fdn. Studies 5/8/69, I.R. Ex.A

"Joint sets...are clay or chlorite filled, smooth, and show movement up to one and one-half feet...Most shear movement in hornblende gneiss, indicating hornblende gneiss less competent than granite gneiss..."
--Dames & Moore Env. Studies 8/18/71, I.R. Ex.A

(NAEC Note: According to D&M's Joseph Fischer, movement defines a fault.)

"A number of small shears have been encountered in borings taken at the proposed sites of dikes, canals, and the main dam. These faults have invariably been partially or totally healed...Because of the minor nature of the faulting observed in the borings, it is interpreted to represent the normal small-scale tearing which typically occurs in areas of folded rocks... mineralization has been restricted to activity along the very old, healed faults."
--Stone & Webster's Geologic Report--Dams, Dikes, Canals 2/6/69

Geologic Report of the North Anna Nuclear Power Station, Virginia

By Paul J. Roper, Department of Geology, Lafayette College, Easton, Pa.

Reactor sites 3 and 4 were visited on May 22, 1973. The sites were in a fine- to medium-grained moderately foliated felsic gneiss. The foliation was dipping approximately 40° to the northeast. I was presented with the impression that others considered these rocks as metasediments, and the moderately dipping foliation to the north was interpreted as representing the limb of an antiform; the hinge of which was farther to the south.

My impression of these rocks and their structural relationships is quite different from those opinions previously mentioned. I would like to propose two things: 1) that the rock is metaigneous rather than metasedimentary, 2) that structurally these rocks are an igneous intrusion and have not been folded into an antiform as suggested.

Several lines of evidence suggest that these rocks are metaigneous rather than metasedimentary. First, the rock type is suggestive of igneous origin. Compositionally, from hand sample identification, it appears to be composed primarily of quartz, plagioclase and microcline. Practically no dark or hydrous minerals were found in this rock at all. I did observe small patches of biotite on an early foliation surface, but in terms of modal percent it must be a minor constituent. Texturally, the rock was holocrystalline and medium-to fine-grained. Compositionally, this would have to be a very unusual metasedimentary rock. The only metasediment with this type of composition would be in the granulite facies of regional metamorphism. I know of no metasediments of his high metamorphic facies found anywhere in this part of the Piedmont. Furthermore, granulite rocks are usually much more intensely foliated than these rocks. Secondly, this rock is unusually homogeneous. Most metasediments show a much more distinct compositional layering of quartzo feldspathic and schistose units. Finally, there were no distinct signs of sheared-out or refolded foliations typical of most of the metasediments found in the Appalachians.

Assuming that this interpretation is correct, then I would also suggest that the grain size would increase slightly to the south in the center of the pluton. The medium- to fine-grained texture at this location is probably due, at least in part, to chilling near the wall rock. I propose that the primary northeasterly foliation S_1 is due to drag and shear along the wall rock as the pluton intruded this region, and is not related to folding. Most metasediments in the Piedmont are believed to be at least lower Paleozoic in age. They have also been multiply deformed and abundant minor structures usually indicate this relationship. However, there is a notable absence of refolded minor structures in these rocks, which is very atypical of metasediments. Furthermore, the S_1 foliation is totally anomalous with F_1 folding found anywhere in the Piedmont except for the slate belt, and compositionally these rocks are very different. F_1 folding in most of the Piedmont is isoclinal and often recumbent. This was not the case with the postulated fold in this area which appeared to be open flexural-slip. Total lack of refolded foliations would classify that fold as an F_1 old. A later crosscutting foliation was observed in sites 3 and 4. I am not sure about the origin of this foliation at this time. It might be a fracture cleavage due to gentle warping or folding of the pluton, or related to some type of cooling phenomena or drag due to faulting. Gash fractures filled with quartz and/or pegmatite also occurred after S_1, but their exact significance was not determined during this reconnaissance. A regional field study would be necessary to determine its origin and significance.

Conclusions—The composition and lack of zenoliths suggest that this pluton crystallized at relatively high temperatures at an intermediate depth below the surface. I suspect that it is a hypersolvus granite. Additional field and perographic studies should be able to verify this interpretation.

Post dating all foliations is a fault system that traverses across sites 3 and 4, and trends toward reactors 1 and 2. The existence of this fault cannot be denied! It is clearly indicated along the walls of pits 3 and 4. A schematic drawing of the fault in the west wall of reactor site 3 is illustrated in figure 1.

The main fault consists of a gouge zone varying from 1–10 inches thick with numerous slickensides. The gouge zone surrounds elongate lithoclasts of felsic granite and sheared-out quartz veins up to four feet in length. Adja-

cent to the gouge zone is intensely cataclasticized granite and truncated quartz veins, and quartz-filled gash fractures. Both the veins and gash fractures usually have a fracture cleavage associated with them. The fault plane dipped moderately to the northeast approximating, but cutting across the dip of S_1 foliation. The floor of reactor site 3 showed a very prominent subhorizontal grooved or striated lineation in the cataclastic rocks associated with the fault. I have tentatively interpreted this lineation as representing the direction of movement along the fault. The relationship of these lineations to the fault plane is best exposed behind reactor 3 above the pit. If this interpretation is correct then there is a substantial strike-slip component associated with the net-slip of this fault. However, the low angle of dip (approximately 45–50°) of the fault makes it very unlikely that it could be a strike-slip fault. Normal-slip displacement of approximately ½ inch was observed within ten feet of the main shear zone, but this offset probably only records the last movement along the fault, which probably does not characterize the true movement along this structure.

As indicated in Figure 1, both the hanging wall and the foot wall of the fault zone are clearly exposed. The hanging wall has several additional subparallel shear zones of lesser intensity than the main fault zone. In general, these zones appear to decrease in intensity to the north as the distance from the main fault is increased. These subparallel shears appear to be gently curved and are suggestive of splays that bifurcate off the end of a fault. Crosscutting the trend of the fault system, in the hanging wall, are a few southwest dipping second order fractures. These intersecting shear surfaces have resulted in the hanging wall being more intensively fractured than the foot wall. The fracturing along the northern tip of the hanging wall and foot wall adjacent to the fault has exposed the granite to deeper and more intensive chemical weathering (saprolitization) than in adjacent areas (Fig. 2). This region will also be the site of intense chemical weathering in the future and may result in an unstable base under the reactors. Unless this problem is dealt with it could be a source of constant trouble in future years. An older surface was also observed in the foot wall of reactor site 3, but it was not nearly as prominent or as intense as the main fault zone.

Two possible suggestions for improving the stability of this site are offered in this report.

1. The reactor sites are located directly over the fault. Therefore, if the reactor pits are deepened they will penetrate the upper lip of the hanging wall and would rest on the foot wall, which probably would provide a more stable foundation. (Fig. 3) Deepening of these pits would also be below the incipient saprolite zone and therefore would be more resistant to chemical weathering.

2. Moving the reactor sites to the south would have the same effect as deepening the pits. (Fig. 4)

These suggestions are based upon the assumption that no additional faults are present in the subsurface to the south of the present sites. The last suggestion may have an added advantage if these rocks are a granite pluton as postulated in this report. If this is the case, then by moving the sites to the south, one would in effect be approaching the central mass of the pluton, which should be less faulted and more stable.

Dating the timing of the last movement along the fault may be important in order to determine the potential earthquake hazard of this area. Although an exact dating of the last movement is practically impossible with present technology (especially if movement has occurred in the last few tens of thousands of years), it nevertheless may be possible to estimate approximately when this movement occurred. This could be done by locating a site where slumping saprolite due to creep truncates the fault. The most ideal location for obtaining such a relationship would be along the side of a hill which is known to have a thick layer of saprolite which is intensely weathered, preferably to the G horizon of a soil. Such a material is unstable and subject to creep down hill under the influence of gravity. Soil analysis can be made to determine the shear strength of the soil, in this case mobilized saprolite, which can then be equated to the slope of the hill and influence of gravity in order to determine the approximate length of time that the saprolite took to move a certain distance down hill. I rather doubt that this method would be effective for more than a few hundreds or thousands of years. Ideally this relationship

should be obtained on the fault in question. However, if this is not possible, then other faults, especially major faults in the immediate area could provide suggestive evidence that would probably be related to this particular fault. Although saprolite is abundant in this area, it is not as intensely weathered as it is farther to the south. Therefore, this method may not be as easily utilized in Virginia as it would be in the Carolinas or Georgia.

No detailed geologic mapping has been done in the vicinity of the North Anna Nuclear Power Station. However, Neuschel (1970) has made a detailed aeromagnetic and aeroradioactivity survey over 1050 sq. mi. of the Spotsylvania area in Virginia, which includes the Contrary Creek quadrangle in which this nuclear power station is located. Mafic rocks often contain significant amounts of ferromagnetic minerals, and are clearly delineated by this type of survey. Felsic rocks, on the other hand, such as granite, especially those that have crystallized by the typical Bowen trend associated with relatively high oxgen pressures, are usually deficient in iron-rich minerals. Therefore, they would not be clearly outlined by a magnetic study. However, such felsic rocks do concentrate radioactive minerals which can be picked up by an aeroradioactive survey. Such a technique is useful in delineating map patterns of granite plutons. By combining the techniques, supplemented by a field check of rock types, Neuschel (1970) prepared a lithologic map of this region which is useful in interpreting the local geology, as well as the possible tectonic significance of this area.

Earlier in this report, I presented field evidence suggesting that the rock underlying the nuclear power site were igneous or metaigneous rather than metasedimentary. Neuschel (1970, Fig. 4) arrived at the same conclusion from his aeroradioactive survey and field check of lithologies. However, Neuschel's (1970, Fig. 4) is a lithologic and not a geologic map. Nevertheless, his map coupled with my visit to the nuclear power site can enhance further geologic interpretation of the area.

Neuschel (1970, Fig. 4) shows an elongate northeast trending body across the southeastern corner of the Contrary Creek quadrangle, extending into the northwestern portion of the Partlow quadrangle, and the northeastern part of the Buckner quadrangle (Fig. 5 of this text). The nuclear power station is located approximately on the western side of this body about midway along its length on the south side of the North Anna River. It should be noted that the western side of this pluton is abnormally straight suggesting that it is in fault contact with the adjacent hornblende gneiss. The southeastern margin of the stock is also unnaturally straight, suggesting a fault contact in that region as well. I believe that the western border of this pluton represents the fault that underlies the four nuclear reactors. If this interpretation is correct, then the fault is about 3½ miles long and extends under the reservoir. However, Neuschel's aeroradioactivity map (1970, Fig. 3) shows a sharp flexure in the southwestern end of the stock, suggesting that the fault is only about 2 miles long. The flexure is near the location of the power station and might explain the bifurcating or splaying nature of the fault in that area. Nevertheless, the fault would still extend beneath the reservoir. The elongate configuration of the pluton, and its bent northeastern terminus suggests that it was intruded parallel to the regional strucure.

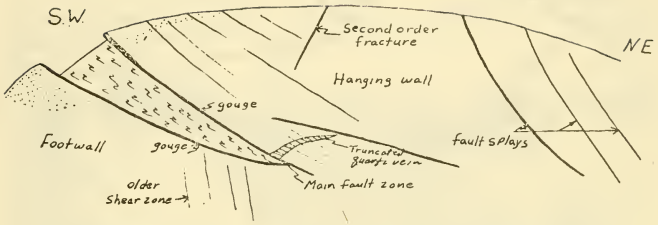


Figure 1 Cross section of west wall of reactor site 3. Plane of section is curved. Stippled area is zone of incipient saprolitization at deeper level.

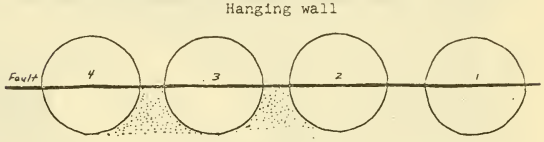


Figure 2 Map view of reactor sites 1-4 showing trend of fault zone. Stippled area outlines approximate zone of incipient saprolitization.

Figure 3 Deepening pit would result in base of reactor lying on the footwall of the fault which would probably be less fractured.

Figure 4 Moving reactor sites to the south would have the same effect as deepening the pits

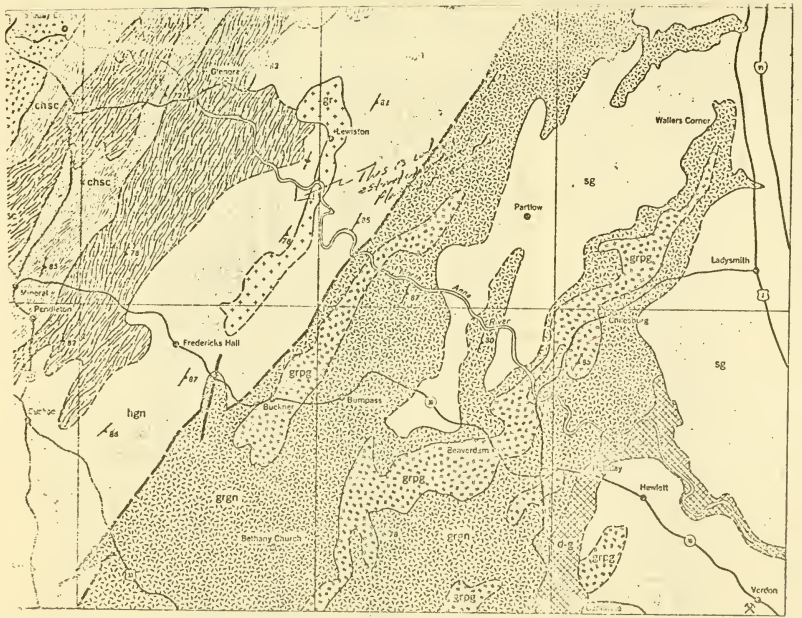


Figure 4. Lithologic map of the Spotsylvania area, Virginia.

References Cited

Neuschel, S. K., 1970, Correlaion of aeromagnetics and aeroradioactivity with lithology in Spotsylvania area, Virginia: Geol. Soc. America Bull., v. 81, no. 12, p. 3575–3582.

June 3, 1975

Professor William Rodgers
Georgetown University Law Center
600 New Jersey Avenue N.W.
Washington, D. C. 20001

Dear Professor Rodgers:

Because some of my views were not clearly brought out in the administrative tribunal hearing on May 28, 1975, it is my understanding that you would like me to elaborate in more detail about my feelings concerning a suitable study plan that would enhance the safety of the North Anna nuclear power plant. Before I do this, I think that it would be worthwhile to enumerate a few reasons why the North Anna plant should merit special consideration for additional study. These are as follows:

1. The North Anna plant is one of the largest nuclear power plants in the country.

2. It is located approximately 50-70 miles from the nation's capital.

3. A fault that has experienced complete loss of cohesion lies strategically beneath all four reactors of this plant. For simplicity, I will refer to this fault as the North Anna fault in this report.

4. A zone known as Neuschel's lineament or the Fredericksburg fault (Higgins et al., 1973) is a much larger structure, conceivably up to 200-300 miles long, which lies just a few miles to the east of the plant. Some controversy still exists as to whether or not this zone is a fault. However, Higgins' testimony says that it is a fault in the Fredericksburg area of Virginia.

5. One of the most intense and active earthquake belts in the eastern United States trends in an E-W direction across the structural grain of the Appalachian mountain system. Although there is some controversy as to the geologic significance of this belt, it does lie to the east, and parallels the trend, of the 38th parallel fracture zone, which is known to exist in the midwestern part of the country. It is feasible that this earthquake belt could be an eastern extension of the 38th parallel fracture zone. If this correlation is correct, the 38th parallel fracture zone could be up to 600 miles long; thus, one of the largest fault zones in the United States.

6. Although earthquakes in the eastern United States are not as frequent and generally not as large as those in the western part of the country, they are known to affect much larger areas of land in the eastern United States than in the western part of the country. Bollinger and Hopper (1971) indicate that eastern earthquakes of comparable magnitude affect an area of about ten times larger than those in the western United States. Thus, it is conceivable that earthquakes along the postulated 38th parallel fracture zone could cause significant damage to at least the foundations of the North Anna reactors that overlie the North Anna fault, because the 38th parallel earthquake belt is just a few miles to the south of the North Anna plant. Although I am not familiar with the details of how the reactors are designed, I have been informed by Dames and Moore that the reactors are built to withstand a considerable degree of vibratory motion from an earthquake. However, it is practically impossible to design any foundation that could not be disrupted by shear if the North Anna fault were reactivated by an earthquake.

The general relationship between these three faults 1) the North Anna fault, 2) Neuschel's lineament or the Fredericksburg fault, 3) the 38th parallel fracture were made known to Dames and Moore by me during the summer of 1973 in a couple of consulting reports. In all fairness to Dames and Moore it should be pointed out that there was little or perhaps no possibility that they were or could have been aware of the potential large scale fault zones that existed in this area before construction began on the North Anna plant. After these relationships were pointed out to them, Dames and Moore did make a reconnaissance geological survey around the site. At the time of this writing I have not had the opportunity to read this report, although Dames and Moore have verbally agreed to send me a copy of the report in the near future. However, I have read testimonies by Dames and Moore and by members of the U.S.G.S. concerning this report. Because of my own experience in working in the Appalachian Piedmont, I am well aware of the difficulties and time involved in producing a geologic map in this complex area. From my limited knowledge of the work done by Dames and Moore and from reading testimonies on this mapping program, I have no reason not to believe that Dames and Moore made a sincere attempt to produce a geologi map of the area around the plant in the time allowed, and within the technical capabilities of their personnel. It is my understanding that Dames and Moore have even referred to this work as a reconnaissance study and do not claim that they can provide definitive answers to the regional problems that could affect this area. In fact I do not believe that it is within the ability of any private company, with regards to the amount of time and manpower that would be required, to adequately study these problems and provide reasonable solutions to the potential tectonic hazards that could influence this area.

Next I would like to direct attention to the magnitude of the problem, why I think this area can be studied in greater detail at this time, how such a study should be approached, and the type of answers that might be expected from such a study. It is important to note that this entire area of Virginia has never been studied except for a very crude reconnaissance survey that had been made in preparing the 1928 geologic map of Virginia. This map is extremely over-simplified and very much out of date. Geologists have avoided studying this area because the geology is very complex, intense weathering of rocks, thick vegetation cover and lack of significant relief to provide a reasonable amount of outcrop control. However, several important developments have been made since the 1920's which now make it much more likely that this region could be successfully studied in greater detail. First, much more is known about Appalachian geology. Second, new concepts in global tectonics have provided us with a better understanding of how the Appalachian system evolved through time, allowing us to develop much more realistic models of regional structures. Third, much progress has been made in recent years concerning fabric analysis, strain facies, poly-deformation and metamorphism, which are critical aspects to any study anywhere in the Piedmont. Finally, Neuschel (1970) published an aeromagnetic and aeroradioactivity survey of much of this region which would serve as an invaluable guide to field geologists mapping in this area with the restrictions with which they would have to cope. These advances suggest that this area of Virginia is now in an ideal state for much more detailed mapping, and the potential environmental hazards of the area make such geologic mapping almost mandatory. One point that I should like to emphasize is that the geologists who become involved in mapping this area should be experienced in mapping techniques in the southern Appalachians. This is important because mapping in this part of the country is very different and much more difficult than anywhere else in the United States. Experienced personnel would be able to produce more accurate maps in a shorter period of time.

In order to apprcach this problem adequately, it will be necessary to do extensive regional geologic mapping. This would be accomplished by mapping 7½ minute quadrangles at a scale of 1:24,000. I would propose that mapping begin with the Contrary Creek quadrangle where the North Anna plant is located. Additional quadrangles that would include Neuschel's lineament as well as quadrangles on either side of this structure would also be mapped. The trend of mapping would parallel Neuschel's lineament and proceed to the southwest where this lineament intersects the 38th parallel fracture zone (i.e. the E-W trending earthquake belt). Extensive mapping would be necessary within and along the 38th parallel fracture zone because this zone is very wide. The extent of mapping on either side of the 38th parallel fracture cannot be estimated at this time, and can only be assessed as more information is obtained about its significance. Because the nature of Neuschel's lineament and the 38th parallel earthquake belt are not known, it is not possible to estimate the number of 7½ minute quadrangles that would have to be mapped in order to provide satisfactory answers to these problems.

Another point that should be clearly outlined at this time is the amount of time and effort that would be required to study this area. As a rough estimate, an experienced geologist working full time on a 7½ minute quadrangle would require at least one year to complete such a study. This assumes that no unusually difficult problems arise in the course of the investigation. I personally know of some very skilled geologists that have worked as long as eight years on some quadrangles, and still had not completed them. Furthermore, any attempt to study a completely new area that is as complex as this area will require at least several years of study before any significant progress can be expected in understanding the geology.

I would like to emphasize several points from the preceding discussion on the mapping program. First, if any reasonably useful answers are going to be derived from such an investigation, it is imperative that an all-out effort be made to conduct this program. Any half-hearted attempt would be a waste of time and money. Secondly, I think that it is obvious that such an investigation is a long term program that could easily last at least ten-fifteen years even with a significant number of geologists working on it. Therefore, in order to be of maximum usefulness to the safety of the North Anna plant this program should have been started at least several years ago. This obviously has not been done, so I would urge that such a program be initiated as soon as possible!

In addition to the regional mapping program suggested above there should also be a long term geophysical investigation that should accompany this study. These should be of two types. First, some type of earthquake monitoring equipment should be installed either near the plant or in some way be associated with the 38th parallel fracture zone. At least two or more types of equipment should be used for maximum effectiveness. One type of study should be seismic, especially with regards to recording and analyzing Vp/Vs waves from microearthquakes. Although I am not aware of the details that have been made along these lines, I have been informed by Dames and Moore that some sophisticated seismic equipment has been installed at the North Anna site. Other types of geophysical studies such as tilt meter recordings, radon quantities in water, water levels in wells, magnetics, etc. could also be employed in obtaining premonitory signals of potential earthquakes. The nature of these studies and type of equipment should be determined by a geophysicist, and some need in modification for such studies may change as more is learned about the geology of the area. Geophysical studies should also be employed with the mapping program in order to determine in greater detail certain parameters of deep-seated structures that cannot be adequately evaluated from surface mapping alone.

The methods proposed in this report are the best techniques that the geological sciences can offer at our present state of technological development. That does not mean that absolute answers can be obtained for all of the questions that abound in this area.

However, it is certain that without these studies very little could ever be accomplished in evaluating the real geologic hazards that we know exist in this area. From a geological point of view, in order to insure the maximum safety precautions of the North Anna nuclear power plant and the people that live in the surrounding area, I believe that at least these measures should be taken.

The proposed geologic studies in this report would first of all provide us with the basic structural pattern and types of rocks in the area. Such a program would also provide us with a much better understanding of what Neuschel's lineament and the 38th parallel earthquake belt are from both a structural and regional point of view. This type of information is critical in attempting to interpret the geologic and environmental hazards of both regional structures with regards to the North Anna plant. Hadely and Devine (1974) point out that earthquakes in the eastern United States generally cannot be related to definite geological structures and therefore we have no way of interpreting why earthquake belts occur in this part of the country as they do. The program proposed in this report would be the first serious attempt to solve these problems and could be of great value to other parts of the Appalachians with similar types of earthquake belts, such as Charleston, S. C. and the Boston area in Massachusetts. Hadely and Devine (1974) also indicate that most earthquakes in the eastern United States are relatively shallow (less than 7 km) which suggests that these critical zones could be reached by drilling. Eventually, some time in the future when these zones are better understood, it might be possible to control the earthquake activity in these zones by fluid injections.

The next problem that I would like to discuss deals with the types of agencies or institutions that would be most capable of accomplishing the type of program outlined in this report. There are three types of institutions that are capable of conducting such a program. They are: 1) the U.S.G.S., 2) the Virginia Geological Survey, 3) a large department of geology that grants a Ph.D. degree in one of the major Virginia universities.

The U.S.G.S. and Virginia Geological Survey both have the man power, experienced personnel and equipment to undertake a program of this magnitude. However, both of these agencies are, and have been, committed to other long-term projects, and it is rather unlikely that either one could initiate a new program of this magnitude in this region without considerable expense.

I believe that the third suggestion, that of one of Virginia's State Universities, is probably the best for several reasons. First, much of the experienced man power and technical equipment is either already available, or else any deficiencies that might exist could be added to such departments in such a way that these groups could design the selection of their staff and equipment specifically to this and related problems. The faculty of such a department could

act as valuable consultants to engineering firms, power companies and the Atomic Energy Commission for similar types of problems related to nuclear power plants all over the world. Third, much of the mapping involved with this problem would be accomplished by graduate students at considerably lower salaries than fully employed professionals in state and federal surveys. Finally, the university involved in this project would provide both industry and government surveys with an important source of highly-trained field and environmentally-oriented geologists, which is something that they both desperately need!

At the present time there is only one state university in the southeastern United States that has conducted large scale mapping programs at the graduate level. That university is the University of North Carolina at Chapel Hill. However, their mapping programs are academically oriented and do not pertain to environmental problems except by accident. The universities in Virginia have no such program. Thus, it would be advantageous, not just to Virginia and the North Anna problem, but to the entire southeastern United States to develop such a field-oriented environmental geological program where some of the professors would actually conduct field studies along with their graduate students.

There are two universities in Virginia that I would recommend for such a program. They are Virginia Polytechnic University and the University of Virginia. Each university has certain advantages and disadvantages which I will attempt to evaluate. V.P.I. has the advantage of having a well-developed and diversified department which is very well equipped. It also has graduate students of high quality who are capable of producing sophisticated theses and dissertations. V.P.I. also has a very well equipped department with regards to instruments needed in this kind of research. Their academic staff is excellent.

However, there are some significant disadvantages with V.P.I. First, they are not located very near to the North Anna region which would place some restrictions on the ease of accessibility to the problem area. Secondly, much of the staff at V.P.I. is very specialized and most of them are not involved with field studies or work on environmental problems. The few faculty members who are field-oriented are involved with other long range projects and the North Anna project would probably only be of marginal interest to them. Many, if not most, of the graduate students at V.P.I. are involved with laboratory or non-field types of problems and competition to bring in more field-oriented students would probably be very keen.

The University of Virginia has a couple of distinct advantages. It is located very close to the proposed study area. The university has a department of environmental sciences, which theoretically should be ideally suited for this type of study. This second

feature is probably one of the most important disadvantages as well as advantages of this department. The disadvantage is that the department does not have any hard-rock or land-type geologists. Most of their staff is involved with oceanography, marine science, high atmosphere physics, and other technical categories that are not even listed in the A.G.I. directory. This means that if this department were to initiate such a program they would have to add at least five or six new staff members to the department. This would be necessary in order to attract a high quality graduate student to the university, as well as the need for the proper staff to conduct such regional studies. The types of geologists that would have to be added to this staff to provide a strong Ph.D. program in hard-rock geology would have to include: 1) structural geologist (field-oriented), 2) petrologist (field-oriented), 3) analytical geochemist, 4) geophysicist, 5) geochronologist, 6) geomorphologist. A great deal of technical equipment would also be needed to support the research of these specialties. Although these are significant disadvantages, they could also be considered as advantages in that a new phase of the department could be tailor-made for a wide range of environmental geological problems. In the long run, such a department might be able to be much more efficient in providing the type of program outlined in this report. The University of Virginia may have an unexpected advantage as well with its program in marine geology. If the E-W earthquake belt is part of the 38th parallel fracture, then I can see no reason why it should terminate at the coastal plain. It is possible that this structure continues under the coastal plain and continental shelf. If it could be traced through part of these provinces then oceanographic work along the Virginia coast may be able to correlate this trend with submarine canyons on the continental slope and a transform fault farther out to sea. If such a relationship could be proven, i.e., that the 38th parallel fracture is a transform fault, then we will have a much better idea about the nature of this fault zone and how to treat it. It would also be possible to then link the origin of this fault directly with models associated with the global tectonic theory.

Finally, I have been asked to state my interest and availability with regards to a program that would provide a remedy to the North Anna problem. My interests are as follows: I am very interested in the geology of this area, not only from an environmental point of view, but an academic one as well. I believe that any large scale research program in this area would make an important contribution to Appalachian geology as well as to the North Anna problem. At the present time I am looking for new professional opportunities in either the academic or industrial world. I do have several offers from universities and industry and I am under pressure to respond to these contracts within the next couple of weeks or so. Therefore, it is very possible that I will be leaving Lafayette College this summer. I would prefer to remain in the academic profession if I can teach at the graduate level and conduct research with well-qualified graduate students. Therefore,

if a position were to be available at one of the universities mentioned in this report, I would be very interested in it, especially if it involved the geology of the area and problems discussed in this report.

References Cited

Bollinger, G. A., and Hopper, M. G., 1971, Virginia's two largest earthquakes - December 22, 1875 and May 31, 1897: Bull. Seismo. Soc. Amer., V. 61, No. 4, p. 1033-1039.

Hadley, J. B., and Devine, J. F., 1974, Seismotectonic map of the eastern United States: U.S.G.S., MF-620, p. 1-7.

Higgins, M. W., Fisher, G. W., Johnson, S. S., and Zeitz, I., 1973, Preliminary interpretation of an aeromagnetic map of the crystalline rocks of Virginia: Geol. Soc. America, Abs. with Programs, Northeastern Sec. Mtg., Allentown, Pa., V. 5, No. 2, p. 178.

Paul J. Roper
Assistant Professor

PJR:gy

Senator METCALF. The next witness is Mr. Mark Silbergeld, and another old friend from Consumers Union. We welcome you to the committee. Even though it is 1 o'clock, you have just as much time as you need and want, because your testimony is important.

TESTIMONY OF MARK SILBERGELD, ATTORNEY, CONSUMERS UNION, WASHINGTON OFFICE

Mr. SILBERGELD. Thank you, Mr. Chairman, I will submit my full statement for the record.

Senator METCALF. It will be printed.

CONSUMERS UNION / A NONPROFIT ORGANIZATION / PUBLISHER OF CONSUMER REPORTS
Washington Office: 1714 MASSACHUSETTS AVENUE, WASHINGTON, D. C. 20036 / 202-785-1906

July 23, 1975

Honorable Lee Metcalf
Chairman
Subcommittee on Reports,
Accounting & Management
Committee on Government Operations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is to update a portion of my testimony of July 22 on information management by regulatory agencies. Please enter a copy of this letter into the hearing record preceeding my prepared statement.

In my prepared testimony, which was originally scheduled for delivery on June 25, 1975, and which was delivered to the committee staff on June 23, I commented, concerning the Federal Trade Commission's line of business program and the General Accounting Office's review thereof, that a number of key industries were too broadly defined for reporting purposes, so that the government and the public would not be able to obtain a very good economic picture of such key products as passenger automobiles. My testimony of this past Tuesday reflected this understanding.

Upon returning to my office after Tuesday's hearings, I was pleased to learn that earlier this month the Commission's submission to GAO of the new proposed Form LB for reporting year 1974 reflects my suggestions, previously submitted to the Commission as a comment on proposed Form LB, with regard to passenger automobile. The product category which previously lumped together passenger automobiles, trucks, taxicabs, and a variety of municipal and highway maintenance equipment and military vehicles has now been very neatly disaggregated by the Commission so that there is a separate category including only passenger cars, passenger car chsses, and passenger car bodies. There are also separate categories for trucks, for buses, for combat vehicles, for truck trailers and for motor vehicle parts. These changes, which have been approved by a vote of the FTC Commissioners, will greatly improve the public understanding of these separate product industries when the 1974 line of business report is prepared and released. The Commissioners and the line of business program staff are to commended for their responsiveness to our recommendations. Especiall

TNG-3

since this matter is highly technical and there is no great popular credit to be garnered from making the suggested change, it is clear that the Commission acted out of its concern for the quality of its data management program.

I hope that in the near future the Commission will adopt additional changes of this sort in a few key areas, especially prescription drugs, which I also recommended to the Commission and which were not made for the 1974 Form LB. The improvement of the automobile reporting categories certainly demonstrates that the Commission has an open mind to constructive suggestions in this regard.

It is interesting to note once again, representative of your comments on Tuesday, that was a citizen organization, not the GAO pursuant to its review function, which helped to bring about change. I believe that this matter should still be pursued with GAO.

I want to thank you again for the opportunity to testify on last Tuesday.

Sincerely,

Mark Silbergeld

Mark Silbergeld
Attorney
Washington Office

cc: Honorable Lewis A. Engman
Dr. William F. Long

-2-

[The prepared statement of Mr. Silbergeld follows:]

PREPARED STATEMENT OF MARK SILBERGELD, ATTORNEY, CONSUMERS UNION, WASHINGTON OFFICE

Mr. Chairman, Consumers Union[1] appreciates very much the subcommittee's invitation to testify at these hearings on information management by the federal independent regulatory agencies. Information is the key to our complex economy. It is used to tell managers how to manage, investors where to invest, competitors and potential competitors where to compete, government where there are regulatory problems, economists how to analyze economic functions and—in many instances—consumers how to shop. It is our experience that the more useful for these purposes information which is collected by the government may be, the more likely it is that both private interests and, often, the government will seek to keep that information from public disclosure.

The subcommittee has posed a series of twelve questions regarding regulatory agency information, among them (1) what is the quality of the information collected, (2) how has the General Accounting Office performed its responsibilities in reviewing proposed independent agency forms used to collect information systematically, (3) how available is the information collected to the public, and (4) do the collecting agencies help the public to find the collected information from their files? While we cannot, quite obviously, provide the subcommittee with complete and comprehensive answers to these questions, we believe that the benefit of our experience will assist the subcommittee in answering some of them.

We would like to focus our testimony on three agency information programs. The first is the Federal Reserve System collection of bank interest rates for various classes of consumer loans. The second and third, which are interrelated, are the line-of-business data collection programs of the Federal Trade Commission and the Securities and Exchange Commission. The contrasts in these programs will illustrate our thesis that the better and more useful the information, the more carefully it is kept from the public.

First, however, we believe that it is important to recognize that information costs money. It costs the reporting business concerns money to generate and report information to the collecting agencies. And it costs the agencies money to collect, analyze and publish the information.

On the other side of the coin, of course, there are often benefits to be derived from the collection of information, and these may, should—and hopefully will—substantially exceed the costs of collection. The regulatory uses of the information should produce social and economic benefits to the public. These benefits may be direct dollar benefits in regulated markets or they may overcome

[1] Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the State of New York to provide information, education and counsel about consumer goods and services and the management of the family income. Consumers Union's income is derived solely from the sale of *Consumer Reports* (magazine and TV) and other publications. Expenses of occasional public service efforts may be met, in part, by nonrestrictive, noncommercial grants and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports*, with a circulation of almost 2 million, regularly carries articles on health, product safety, marketplace economics, and legislative, judicial and regulatory actions which affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support.

the costs of not regulating those markets. Potential and actual competitors and investors may be enabled to make more intelligent decisions to allocate among capital markets. Congress may use the information to write more effective laws. And consumers may use the information to make more intelligent decisions in the marketplace.

However, since the collection and use of information is not a "free ride," it is important to eliminate needless collection of information, to eliminate unnecessary duplication of information collection, and to improve the quality of information collection and use. We hope that these purposes will be furthered by these hearings.

FEDERAL RESERVE SYSTEM INTEREST RATE DATA

The recent experience of Consumers Union in attempting to obtain information collected by the Federal Reserve System on the rates of interest which selected member banks charge for various categories of consumer loans is illustrative of many of the points we wish to make here today. The "Fed" collects, each and every month, from some 370 banks across the country, reports of the interest rates charged on a variety of consumer installment loan categories. This information is, of course, available to any consumer from the individual bank upon inquiry, since interest rates are the means by which banks compete for loan customers and, in any event, disclosure is required by the Federal Truth in Lending Act prior to entering into the loan agreement.

However, an inquiry to each reporting bank in the local community would have been necessary for a consumer who wanted to shop for bank credit. It would obviously be useful to find in one place all of the rates for the reporting banks in a given community. The Fed, however, until recently, only reported this information in aggregate form, in their so-called "G.10" survey. Therefore, in the summer of 1973 the San Francisco Consumer Action Group, a particularly effective and resourceful consumer group serving the Bay area, sought our assistance in obtaining the individual bank data for use in a proposed consumers' guide to banking institutions.

We requested the Fed to give us access to the interest rate data but without success. In September 1973, we were obliged to file suit against the Board under the Freedom of Information Act. The Fed's position was that this information was confidential because the Board had assured the banks that it would be treated as such. We argued that this information was not confidential (much of it is advertised by banks, all of it is given to bank customers on an individual basis), that the Board had not in fact assured the banks of confidentiality with respect to this survey, and that under well-established case law under the Freedom of Information Act, such an assurance—even if given—would have no legal effect whatsoever. The Fed filed with the court a number of affidavits from bankers and Fed officials detailing the tragic and baleful consequences to the banks and to the Fed itself if the interest rate information were publicly disclosed. The "horribles" that were predicted included: the destruction of the Fed's data-gathering capabilities; the sub-

mission to the Fed of inaccurate data by banks; a refusal by the reporting banks to participate in the survey; competitive harm to reporting banks; impairment of relationships between the banks and their customers; and misleading of consumers by those who would publish the information.

In making these blanket claims, predictions, and representations to the court, the Board apparently played rather fast and loose with the facts. First, the Board vigorously resisted our suit and made these claims without even bothering to find out whether or not the reporting banks did in fact consider this information confidential, and if so, whether that confidential status extended to all or only some of the information. Second, even if the Fed considered this information to be confidential, and even if it was correct in that determination, the Board was obligated under the Freedom of Information Act to determine whether all or only some of the requested information was confidential, and whether all or only some of the banks considered it to be so, and to publicly disclose what was not confidential. The Board did none of this but simply made a blanket claim of confidentiality for all of it and for all banks. Third, the Fed never indicated whether the few banks whose affidavits were submitted were selected at random or not, but in view of the striking similarity in wording of the affidavits and in view of what subsequently transpired, we have the firm impression that the Board made no effort to determine how the reporting banks actually felt about disclosure but instead tried to create the impression that the banks submitting affidavits were representative of the 370 banks in the survey.

Most shocking, however, is the fact that in December 1973, the Board conducted a special survey of banks participating in the G.10 survey, inquiring as to whether the banks considered the interest rate information with respect to credit card loans—one of the loan categories at issue in the lawsuit—to be confidential. Of the 171 banks responding to this special survey, 73.7% stated that the information was not confidential, a statistic that made an utter mockery of the Board's position in the lawsuit, at least with respect to the credit card loan category. Yet the Board never even revealed to the court the existence of that special survey, much less its dramatic—and legally relevant—findings, and to this day has never done so. We only learned of the existence of this survey in a discussion with Board officials on April 3, 1975, when we happened to ask if any such surveys had ever been conducted.

In May 1974, the U.S. District Court held that all of the information that we had requested was in fact in the public domain, was not confidential, and must be made publicly available by the Fed under the Freedom of Information Act. The Board immediately obtained a stay of that judgment pending appeal, and filed an appeal. In November 1974, the Court of Appeals remanded the case to the District Court for further findings. In January 1975, after having been held up by the Board for almost one and one-half years, we offered to settle the case on the following basis: we would agree to obtain the data on a prospective basis only (beginning with the February reports), thus enabling the Board to save face with the

banks to whom it claimed (contrary to fact) to have assured confidentiality, and we would agree not to seek some of the data to which, the District Court had ruled, the Freedom of Information Act entitled us (but which was of less interest to consumers).

On February 19, 1975, we were informed by a Board official that the Board had information that our magazine, *Consumer Reports*, was publishing some of the interest rate information in its March issue, that the Board viewed this matter with the gravest concern, that Chairman Burns was "determined to get to the bottom of this," and that the Board was requesting that *Consumer Reports* refrain from publishing the information. We replied that it was too late to stop publication of the information and that even if it were not too late, that *Consumer Reports* would feel an obligation to its readers to publish it, particularly in a period of inflation, high interest rates, and high unemployment, a period in which consumers needed all of the help they could get. We subsequently were informed that in view of these developments, the Board was breaking off settlement negotiations.

Several days later, the *Washington Post* brought to light the fact that Chairman Burns had requested the FBI to conduct a criminal investigation of the "apparent theft" of the information. This was followed by Congressional inquiries into the matter, including correspondence from Congressman Patman to Chairman Burns. As a result of these revelations, the Board informed us on March 3, 1975 that it had authorized its staff "to determine from the member banks of the Federal Reserve System voluntarily participating in this G.10 survey the extent to which the interest rate data they report on Form 835 may be generally available to the public." Note that the Board decided to take this elementary step not before it rejected our original request for information, not before it forced us to bring suit, not before it submitted affidavits to support its insistence that disclosure of this information would be calamitous for the industry and for the Board, not before it took an appeal, and not before it tried to pressure *Consumer Reports* to suppress the information—but only after the most intense public embarrassment and Congressional pressure had been brought to bear, and after we had made it clear that we would go back to the District Court to establish once again our legal right to the information.

The results of the Board's survey were given to us informally on April 3, 1975, they have never been made public by the Board. And with good reason, for they could hardly be more damaging to the Board's position in this whole sorry affair. Of those banks with a single interest rate for a particular consumer loan category, over 90% responded that none of the information reported to the Fed was confidential. Even in the case of those banks which charged customers varying interest rates for consumer loans, more than 50% stated that none of the information was confidential. It also turned out that despite all of the Board's predictions that disclosure would cause large numbers of banks to drop out of the survey, only about ten fewer banks had reported to the Fed after the public listings of banks and rates in *Consumer Reports* than had reported before the listings were published.

When the Board officials showed us the results of their own survey, we assumed that this now-ancient controversy was finally at an end and that the Board would now comply with our original information request. We are buoyed in this conviction by the results of two small surveys which we conducted ourselves, in which every bank surveyed stated that the information was not confidential. We did not count on the Board's tenacity, however, for their initial response was that they would continue to withhold any of the interest rate information which a bank deemed confidential—however unreasonable that bank might be in view of the results of the Board's own survey. It was only after we threatened to go back to court to obtain all of the information, retrospective as well as prospective, that the Board backed down and agreed to make all of the data public beginning May 1, 1975.

This story, unfortunately, does not have a very happy ending. First, Consumers Union incurred enormous expense to fight this 20-month legal battle, expense which it can ill afford and which the Fed refuses to pay. Second, and most tragic, the Fed employee who gave *Consumer Reports* the information that the court, the banks, and the Fed now concede is publicly available under the Freedom of Information Act, was forced to resign from the Fed in the face of a threat of criminal prosecution by the Justice Department.

This is clearly an instance in which the information collected by the regulatory agency is useful to the public in making marketplace decisions. And it is clearly an instance in which the regulatory agency went to great lengths to keep the disaggregated data from the public

FTC AND SEC LINE-OF-BUSINESS PROGRAMS

Two seemingly related regulatory agency information programs of interest to the subcommittee's inquiry are the line-of-business programs at the Securities and Exchange Commission and the Federal Trade Commission. These illustrate well that where the information is more accurate and, thus, more useful, it is less available to the public.

The Securities and Exchange Commission for a number of years has required the nation's larger registered corporations to include, in their Forms 10-K, which are available to the public, so-called "line of business" information. According to the SEC's instructions for completion of Form 10-K, this information is to include for each line of business for each of the past five fiscal years, the approximate amount or percentage of (i) total sales and revenues, and (ii) income or loss before income taxes and extraordinary items, if the line of business for either of the last two fiscal years constituted a major factor in the company's business operations.[1] Product line sales and revenues and income or loss figures hardly give a picture of a corporation or an industry, of course, but when aggregated

[1] Defined as constituting (a) 10 percent or more of total sales and revenues, or (b) 10 percent or more before income taxes and extraordinary items computed without deduction of loss resulting from operations of any line of business, or (c) a loss which equalled or exceeded 10 percent of the previous item "(b)", provided that of total sales and revenues did not exceed $50 million during either of the last two fiscal years, the percentages specified above shall be 15 percent instead of 10 percent.

among the leading firms in a particular product-defined industry such information is essential for use by industrial economists, actual or potential antitrust plaintiffs (including the government), stock market analysts, corporate investment analysts, and so forth. Therefore, if this information as collected by SEC is reliable, timely and available, substantial and beneficial use would almost certainly be made of it.

However, there are some substantial Catch–22's. First, the reporting firm itself decides which and how many products are included in a given line of business. Thus, when the Federal Trade Commission's staff a few years ago studied the Forms 10–K for nineteen corporations, it found that "[w]hereas the average number of lines-of-business per company [as reported on 10–Ks] was five, the average number of corporate divisions was 31." Further, the FTC staff discovered, "Many of the so-called lines of business of the largest corporations encompassed operations in as many as 40 different 4-digit [SIC] industries.

Thus, according to the FTC, corporations were not reporting (and do not report) lines of business which corresponded with product markets, but were reporting very broad lines of business, sometimes as broadly groups as "Consumer Products", which minimized the usefulness of the 10–K data.

Additionally, since each firm defined its own reporting lines of business, there was no comparability between firms, so that economists and others cannot use the data to construct a picture of any given industry's structure or profits.

Further, while the nature of the changes must be generally described in the 10–K, a firm is free, from one reporting year to the next, to change various products from one line-of-business to another, so that if it has an incentive to do so, it may render its own product line performance not comparable from one year to the next.

Both because of the lack of comparability within and between firms and because of the lack of other relevant data—such as advertising expenditures, research and development expenditures, and the like—FTC in the early 1970s determined to undertake its own "line-of-business" reporting program, despite a previous experience in which the announced intention to study the economic performance of the nation's top 100 manufacturing corporations had resulted in an FTC appropriations rider prohibiting such a study. After the 1973 Hart Amendment to the Alaska Pipeline Act was passed, relieving FTC from some two-and-one-half years of resistance to the Line of Business program from the Office of Management and Budget the program was soon submitted to the General Accounting Office under the new procedures for clearance of independent agency data and cleared by OMB for use by the FTC. I will have a few words about that OMB clearance process in a few moments.

The line-of-business program which the Federal Trade Commission is now in the process of instituting [1] is a substantial improvement over the so-called line-of-business program at the SEC, with regard to the quality of the data. However, needless to say, the im-

[1] The effort to collect the data from several firms has been hampered by litigation initiated by those firms.

proved quality and usefulness of the data has resulted in lesser public availability of the data, pursuant to both the FTC's initial rules on public disclosure and subsequent Congressional enactment of a rider on the FTC's fiscal year 1975 appropriations act. Thus, the public has its choice between fully disclosed data of very limited use at SEC and undisclosed data of very great potential use at FTC. Nevertheless, the aggregated data which FTC eventually will release on an annual basis, industry by industry, will be a tremendous improvement over the data contained on SEC Form 10–K.

The FTC data itself is more extensive than the SEC data. In addition to the sales and revenue and income or loss data by "product line", FTC Form L–B calls for disclosure of such additional items as material costs, labor costs, gross margins, media advertising expenditures, other selling expenses, general administrative expenses, total assets and various asset and capitalization data. All of this information is being collected by FTC-defined product categories which will be roughly comparable from firm to firm [1] and will be disclosed on the FTC-defined aggregate product industry basis annually.

From our point of view, the biggest disappointment regarding the FTC data—in addition to the non-disclosure to the public of individual firm data—is that FTC has defined several key industries over-inclusively, so that what we will be able to learn about them from Line-of-Business reports will not be adequate. For example, FTC's product line reporting category for passenger automobiles will include, in addition, ambulances, amphibian motor vehicles, powered brooms (i.e., street sweepers), armored cars, fire department motor vehicles, street flushers, hearses, motor buses, trucks, personnel carriers, reconnaisance cars, road oilers, taxicabs, and virtually all parts used in the assembly of automobiles or as auto replacement parts. It is clear that neither FTC nor the public will have a clear statistical picture of the very important passenger automobile manufacturing industry from the FTC line-of-business report on this product category.

One of the arguments used to justify the use of such a broad category is the accounting costs involved in keeping and reporting data on a narrower basis. In the case of passenger automobiles in particular, however, this argument seems ill-founded. First, as is true of all cost-based objections to Form L–B, claims of cost have not been supported by sound cost justifications which would meet general financial accounting standards. Second, in this particular category which includes passenger automobiles, there are many kinds of vehicles which can be factored out because separate and very specific data must be kept on them for government contract accounting purposes. Finally, due both to the lack of objection cost data and to the difficulty of measuring benefits which would accrue from the data quality improvement, even a demonstration of sub-

[1] Up to 15 percent "contamination" of the data by inclusion of information on different but operationally-related products will be permitted; this is not desirable but is better than any data now available. For example, a plant which manufactures 15% newsprint and 85% paperboard may report all of the data on that plant as paperboard. If the product mix were 16%–84%, separate reporting categories would be required.

stantially increased accounting costs does not necessarily demonstrate a justification for use of the less expensive broader product category. Even if it would be substantially more costly to use the narrower than the broader category, it is quite possible that the benefits would justify this, but we are dealing in benefits such as improved capital investment decisions and improved decisions to enter new markets which are virtually impossible to quantify. Therefore, agency decisions as to how much more cost is justified or how much more cost is too much cost is a matter both of judgment and of policy, not a matter solely of cost accounting.

The same is true in such other important product categories of current or continuing economic concern as fuels, fresh meat, and ethical drugs. We called GAO's attention to this problem in our April, 1974 comments to GAO in connection with the Comptroller General's review of the proposed Form L–B.[1] The GAO, in its subsequent approval of Form L–B, paid a great deal of attention to the question of the costs to the reporting companies which would result from the issuance of orders to file Forms L–B—a question which the Hart Amendment requires GAO to address. The GAO did not mention at all, however, the increased usefulness of the data which would result from an improved definition of a few key product categories—although GAO is also required by the Hart amendment to address the question of whether the form in which the regulatory agency proposes to collect the data will maximize its usefulness to the public. Since it is clearly an issue of great public interest whether the Federal agencies, the Congress and the public have good or not very good data on the economic performance of such key industries as automobiles, meat processing, drugs, and energy, we must judge GAO deficient in its performance by reason of its failing to address this important issue after it was raised both in written comments and at a meeting between GAO staff and consumer representatives.

We have also called FTC's attention to this problem in our May, 1975 comments on proposed revisions in Form L–B, but the Bureau of Economics staff is unable to tell us what changes, if any, will result.

Our conclusions regarding the two line of business programs can be stated as these. The SEC program is not very useful but it is very available to the public. The FTC program would be very useful if the information were available, but it is not available except in aggregate, industry-wide form. However, the FTC information, even though only disclosed in the aggregate, is better than any information presently available, from the SEC or any other public source.

Mr. Chairman, we have presented a look at only three government information systems this morning. We have had experience with other government information systems, both at regulatory agencies and within the executive branch. While there are, obviously, types of information which are systematically made public much more readily than the FRB interest rate data or the FTC line of

[1] A copy of these comments was submitted for the record.

Business data,[1] our other experiences nonetheless generally comport with the aforestated conclusion that the information's availability to the public, where the agency has discretion to make disclosure, is likely to be inversely proportional to the quality and usefulness of the data. (End of prepared statement.)

Mr. SILBERGELD. I must warn you that frequently my summaries run as long or longer than my prepared statement. I will try to minimize the amount of time that I require today.

Consumers Union, as you may know, has long been involved in the question of agency-collected information. When the Freedom of Information Act was enacted and became law, we filed one of the first suits in the country in order to obtain hearing aid data from the Veterans Administration, which they refused to disclose even though it would have given shoppers for hearing aids a tremendous amount of useful information in shopping for the best product at the best price.

About 2 years ago now, I guess it was, we successfully—and this is one of the few instances I know in which this has happened—got the temporary emergency court of appeals to rule unlawful the Cost of Living Council's regulations under the Hathaway Amendment, which dealt with the form in which they were required to collect and disclose information on tier I reporting firms.

We have, and I have personally, spent a great deal of time watchdogging the Federal Trade Commission's line of business program.

And, as everybody knows from recent TV and newspaper stories, we were involved in the reporting of "secret" public information. The Federal Board has created that new category.

We now have "secret" public information with regard to interest rates. Chairman Burns was so outraged that the public could get from consumer reports what they could get by walking into any bank, that he called in the FBI to find out who made this public information public.

Our experience with all of this boils down to what I suppose I would call Silbergeld's law, except that there is an old rule of trademark law that says you can't trademark something that is obvious, and that law is that the more useful the information is to the public, the less likely it is to be available to the public.

Senator METCALF. We will add that to our collection of law.

Mr. SILBERGELD. I think that goes right along with the three rules of law that you enunciated at the beginning of the session this morning, Mr. Chairman.

To illustrate this, I would like to briefly look at three experiences, first the Federal Reserve Board interest rate experience, and then a comparison of the Federal Trade Commission and Securities and Exchange Commission line of business program.

The last two provide an interesting contrast, which illustrates our point all too well.

At the same time, I would note that of course it costs money to

[1] For example, the FTC public disclosure regulations provide for disclosure of much of the information contained in the closed files of law enforcement investigations undertaken by FTC, even though such information at least arguably is exempt from disclosure under the Freedom of Information Act.

collect data. Data is not a free ride. It costs money to run the Government agencies or the Government agency segments that design the questionnaires, process the returns, see that they are properly completed, and then analyzed the returns and make the information public. And it costs additional money for the reporting firms to provide the information.

Therefore, we ought to make sure that the information we are collecting is useful, is not duplicated and is—this is most important, I believe—used with the maximum efficiency, including the assurance that it is collected in a form which permits maximum use by the public and the Congress.

That doesn't happen very often. I will give you a good example when we get the FTC line-of-business program.

The Federal Reserve experience was very interesting because, as I have said, the information that we sought from the Federal Reserve Board and which we had to go to court to obtain is something that you, as a customer, of a bank or a prospective customer of a bank can get by walking in and asking how much you would have to pay for a particular type of loan.

Indeed, the Federal Truth in Lending Act says that before they conclude or enter into a loan agreement with a customer, they must provide that interest rate information in a disclosure form which meets the requirements of the Fed's regulation Z.

The Fed collects interest rate information for various categories of consumer loans from a sampling of, I believe it is 370 banks around the country.

This information, of course, would be most useful to consumers in the cities where there are two or more banks in the reporting sample.

The San Francisco Action Group a couple of years ago decided that they would take advantage of the potential usefulness of this, seek the information so that they could provide consumers who were shopping for credit with a booklet on this information for the Bay area.

They sought our help and we requested the information from the Fed. We were told that this information once it was collected was confidential because the banks which submit the information consider it confidential.

So we filed the Freedom of Information suit. The Fed continued to make, throughout the litigation, a blanket claim of confidentiality for all of the data for all of the banks. Unknown to us and unknown to the court until late in the litigating game was a secret Fed survey, showing that 73.7 percent of the banks who responded to the Fed questionnaire on this question did not consider the information confidential.

We accidentally learned of this in settlement discussions with the Federal Reserve Board staff.

In May of 1974, we obtained a favorable judgment from the U.S. District Court and the Fed immediately appealed.

In February of 1975, while the case was pending before the Court of Appeals, there was leaked to Consumer Reports the data that we were seeking in court. After some discussion among the legal staff

outside counsel with the journalists at the magazine, we decided that this information was public and we were entitled to use it and we determined to go ahead and use it.

When Chairman Burns found out that this public information was going to be published and made available to the public, he called in the FBI. It was only after at least two, and I believe three, it may have been as many as four Congressional subcommittees, demanded to know why somebody was being investigated for making public information that was already public in its uncollected form did the board back down and finally agree that beginning with the data for May 1975, this information will be made available on a regular basis.

Throughout this process the Fed claimed, and I think this is important, Mr. Chairman, because it is a claim that comes up every time it is suggested that information collected or to be collected by a regulatory agency should be made public, the Fed claimed that disclosure without result in a discontinuance of the fine, voluntary cooperation which they had had from the reporting banks.

We hear that everytime it is suggested that data from a regulatory data program be made public.

Only 10 of the 370 reporting banks have discontinued their voluntary cooperation.

Senator METCALF. Were those 10 the largest banks?

Mr. SILBERGELD. I don't know who they are. I can try to find that information for the record. I would add that that is without any effort to our knowledge of the Fed to seek to enforce the requests for information.

Senator METCALF. I will ask Mr. Reinemer if we can find out who those 10 were.[1]

Mr. SILBERGELD. The other interesting thing, of course, is that the assumption is that the information can only be obtained if it is voluntary.

Senator METCALF. If it is just 10 of the medium-sized or smaller banks, it would seem to make very little difference. If the largest banks in the country are willing to volunteer this information, it would seem that we should require it from every bank.

Mr. SILBERGELD. I would think so. I would also emphasize your word "require," Mr. Chairman, because it seems to me while the Government puts a great deal of emphasis on cooperation that the public has a great deal more confidence in information which is required under some penalty of law for the filing of incorrect data.

This may not necessarily be the program, but I am always puzzled when agencies complain that they will have to use process. Yes; I understand that there may be a period in which there is litigation to resist the collection of the data on the ground that it is going to be made public.

Senator METCALF. I am not going to argue with you about that. But I want to say that sometimes this committee has written to some of the largest corporations, some of the largest banks in the United States and has had voluntary cooperation. And we rely on that and appreciate it and go forward with some of the other investigations regarding corporations that don't comply.

[1] See p. 209.

Mr. SILBERGELD. I agree. My problem is where there is resistance and the committee would rather use an assurance of confidentiality, not the committee but the agency would rather use the assurance of confidentiality than a subpena, even though the information should be made public.

The sad upshot of this is that not only did we have to spend 2 years in litigation to make public information that everybody thinks should be made public.

Senator METCALF. But some of the leadership that we have seen in disclosure of the information has come from voluntary disclosure of a handful of corporations. I remember Mobil gave us some information as to its stockholders. The First National City Bank was the first one that disclosed its investment portfolio. After that we had disclosures from others.

So I want to give full credit to these people who came in and said we want to have disclosure; we want to volunteer and we want to participate.

Mr. SILBERGELD. We have had that experience just recently also. In February, late January or February, we sent a questionnaire to the largest airlines, asking for their information on information about the use of credit cards, and on discounts to travel agencies.

All but one of the airlines replied that they couldn't give us the specific information. Many of them claimed because it was, it was confidential, business information, and so forth.

TWA had no problem. Sent it right to us. If TWA could voluntarily provide that, it not only disproves it all, but it was very reassuring to find that somebody was not just falling back on the old stock, boilerplate reply to every request for information that comes in.

We were very pleased to see that we could get that information voluntarily without having to go through the CAB.

Senator METCALF. Maybe, as a result of that leadership, or at least the volunteers, we will get other information from other airlines because they will just say, look, if TWA provided this, so can Northwest.

I want at this time to give full credit to these public-spirited leaders who have volunteered the information and haven't hidden behind all of these stereotyped and boilerplate things that you are talking about.

Mr. SILBERGELD. It is refreshing when we see it.

The line-of-business programs are interesting because we have two supposedly similar programs run by two different agencies. We cannot only contrast the information but also contrast the availability of the information as a function of its accuracy and usefulness.

The SEC requires disclosure annually, by registered corporations over a certain size, of so-called line of business information. The interesting thing about the SEC's requirement is that it permits the reporting companies to define their own lines so that within a line of business you may have such a jumble of different products which are not substitutable or not in competition with each other, so that even if you just look at one company's products you don't know what the data really relates to.

When you try to take that information and compare it with the information from companies that are in competition in various lines of business with that company, it becomes completely incomparable because they may have put the same competing product into two different SEC line of business reporting categories.

Furthermore, the SEC permits the company, provided it explains what it is doing, to change the reporting category for any given product from one year to the next. So that this year's and last year's reporting category will not necessarily contain the same products for purposes of comparison.

When you take both of these variables, what it means is that the SEC's line of business program really isn't very useful if you want to compare this year with last, or if you want to compare company A with company B with regard to specific products or product categories.

As a matter of fact, when the FTC was developing its line of business program, its Bureau of Economic staff did a study. They found that, in a sampling of large SEC reporting firms, the firms averaged 31 corporate divisions, but only 5 different reporting line of business categories for the SEC requirement purposes; that some of the lines that were reported as a single line of business to the SEC annually had as many as 40 separate four-digit SIC standard industrial classification categories.

This meant, of course, that that information was completely useless for industrial analysis. I would add I think it made the information pretty useless as far as investors are concerned, too, and certainly as far as stockholders are concerned if they want to know if the company is holding onto losing operations.

Nevertheless, the finding was that there were as many as 40 separate four-digit SIC categories in a single so-called line of business.

The FTC program defines categories much more narrowly; that is, it seldom has more than—it is never broader except for the nonmanufacturing categories such as mining and agriculture than a three-digit SIC group and frequently within a three-digit group the FTC will, from the three-digit category, break out one, two, or three related four-digit SIC categories in which it has a special industrial analysis interest and define that as a separate line of business for reporting purposes.

So the information to be obtained from the FTC program is very much more defined in terms of products which compete with each other in the marketplace.

It is therefore much more useful. Needless to say, if we apply the law which I suggest, it should not be very difficult to determine that the SEC information is fully available to the public while the FTC information, because it is so much more useful and reliable is not available to the public and will not be available to the public except in aggregate form by industry-wide category.

So that we will never know if we see five or six, say, companies in a reporting category how the profits, the costs, the advertising to sales ratios break down by leading firms versus the smallest firm that is reporting to the FTC. Because the information is much better, the information is not public.

That is partly because the FTC decided they would have to proceed on that basis. When they began this program, the program was extremely politically sensitive. I believe you were around, Mr. Chairman, back in the 1960's when Rand Dixon was Chairman and the Commission sought to do a study on the 100 largest corporations.

Congress attached a rider to the Commission's appropriations bill and ordered them not to do it. The Commission was well aware of that when they designed the present line of business program.

They themselves decided for whatever reasons, but I am sure that was in the back of their minds, if not in the front of their minds, that it would be impolitic to both seek this information and seek to make it public. Sure enough, the House Appropriations Committee attached a rider to the FTC's fiscal 1975 appropriations, which assured that the Commission's own understanding of the political situation became a matter of law.

So we won't know it because the data is too good. I must say I have some complaints about the data and I also have some complaints about GAO.

The data will allow up to 15 percent contamination at the establishment level. If a company has a plant that is making two noncompeting but industrially related products, made out of the same manufacturing process, the same equipment, but which don't compete with each other, such as newsprint and paperboard used in construction, if a company is making paperboard at its plant, at a particular plant, and 15 percent of the plant production is in newsprint, the byproduct, they can report it all as paperboard.

That will result in some substantial contamination; but it is still a lot better than what we have.

The thing that really bothers me about it is a few key reporting categories. Presumably you would say the FTC is now going to have a line of business program in which they define the reporting categories and they don't let the companies change it from year to year and they are really going to get the goods, now we can tell what is going on in the automobile industry. Right? Wrong.

The passenger automobile which is probably the singlemost important industrial product in our economy is going to be reported to the FTC in a reporting category which also includes, and I will read from my prepared testimony here, "ambulances, amphibian motor vehicles, powered brooms—that is, street sweepers, armored cars, fire department motor vehicles, street flushers, hearses, motor buses, trucks, personnel carriers, reconnaissance cars, road oilers, taxicabs, and virtually all parts used in the assembly of automobiles or as auto replacement parts." [1]

That is how much we are going to know about the competition and the other information that is going to be collected on the passenger automobile.

Senator Metcalf. Do all of the automobile manufacturers make all of those various exotic sort of vehicles?

Mr. Silbergeld. I don't know if American does. The three largest domestic manufacturers certainly do or virtually all of them. If

[1] See updating letter from Mr. Silbergeld preceding his testimony, p. 142.

they don't make all of them, they make some of the other things in the category that I didn't include, and it involves a lot more military vehicle type of equipment.

The distressing thing is, and I note that it is one of the questions posed by the committee, how is GAO performing? Pursuant to the Alaska pipeline provisions, GAO first reviewed the form L–B in early 1974, Mr. Chairman. One of the things that they did in reviewing it was to call a meeting with a group of consumers. GAO wanted consumer criticism and comments on FTC's first report of the proposed form L–B.

Senator METCALF. Who was the first one to discover that the right-of-way was illegal and too broad?

Mr. SILBERGELD. I am sorry?

Senator METCALF. In the *Alaska Pipeline* case, of course, somebody came up with the discovery along the line that the right-of-way granted by the Secretary of Interior was illegal. It was a right-of-way for pipelines that was narrower than the one that was granted.

Who was the first one to discover that?

Mr. SILBERGELD. I don't know.

Senator METCALF. Did GAO discover it?

Mr. SILBERGELD. I don't think so. I am quite certain not.

Senator METCALF. The Department of Interior didn't know about it. I just wonder. There was an environmental suit and the court quite properly held that Congress passed a law and said you were allowed to have a right-of-way of a certain width, and all of these people screamed to high heaven that they couldn't exist with such a right-of-way, but that was the law and the court quite properly issued an injunction.

But nobody discovered it for a long, long time. The law provided that we were granting a right-of-way.

Mr. SILBERGELD. This is another instance of that because the law with regard to reports that have to go through GAO has two provisions in it. One thing they are supposed to review for is the cost and the burden to the reporting companies.

The other thing that they are supposed to review for is whether the data is being collected in a form which makes it maximize its usefulness to the public and the Congress.

GAO spent a great deal of time, in their report to the FTC, on the question of cost to burden. They spent no time in response to our comments to them about the definition of the passenger automobile reporting category or several other categories even though each one of these is their responsibility.

That is most interesting because we are still stuck with what is going to be completely inadequate reporting category definition for passenger automobiles.

On the question of costs in which GAO spent most of its time in reviewing the form L–B for the FTC, we had a situation where they were being told by the FTC that it would cost about $10,000 per reporting company.

That was their initial estimate. It was upped several times; FTC was told by the companies that it would cost hundreds of thousands and some companies said for them millions of dollars for reporting.

Now we see GAO, having spent all of its review effort on cost that, for those 228 companies that have so far reported to the FTC for the first line of business report instead of going to court and seeking an injunction, that the average cost per reporting firm, in the face of the FTC's $10,000 estimate and the firm's estimates in the hundreds of thousands or millions of dollars, was $56,000 per reporting firm.

If the FTC was off initially by a factor of five or six, then the companies were off by a factor of several thousand.

I think that does not reflect well, Mr. Chairman, on GAO's performances of its responsibilities, although they should rightly be concerned about cost and burden. Of course, I have the advantage of hindsight, but nevertheless as it turns out, the company's claims were greatly exaggerated, and while GAO spent all of their effort on that question, they completely ignored the question of whether the information was being collected in the most useful form. We got no GAO input on that. I would like to see, and perhaps this Committee can make its views known to some redress of the balance, so the GAO pays as much attention to the question of whether Congress and the public can use the information; or best use it in the form collected as to the question of reporting burden.

We see reporting burden exaggerated every time we seek information through the Federal Government. They should become accustomed to that.

We see on the other hand consumers saying we aren't—I'm going to pick up Mr. Clayman's theme—We aren't going to get the information in the form we need it if you let the questionnaire go through like this.

You have to be more demanding from the reporting firms.

That concludes my summary, Mr. Chairman.

Senator METCALF. The entire statement has been included in the report.

Mr. RYTER. I appreciate very much your testimony. It is very fine and tracked a lot of areas that I think need to have a lot more public hearing that we have had in the past.

As a member of Consumers Union myself, I am appreciative that you do come up here and testify and let the Congress know what is happening.

I certainly don't think, and it is not meant in any sort of forward way, but you asked the question in the beginning of your testimony, which was who should absorb the cost burden? It is a question that I think the minority would be interested in finding out what your expert opinion should be.

If we do have an average cost at an aggravated SIC level of $56,000 per firm under this line of business reporting, who should be made to take the burden?

Mr. SILBERGELD. The public should, because the purpose of the information is to benefit the public. We pay for it in two ways: for the costs that are incurred at the FTC, and the GAO, we pay for it in our tax dollars.

The costs incurred due to the burden on the reporting company, we pay for that in the cost of goods.

Mr. Ryter. So you feel we should have a reimbursable system?

Mr. Silbergeld. No. I am perfectly happy to have it passed along the way it is now because the people who are supposed to be benefiting from the tangible and intangible benefits of such a collection program are the people who purchase those particular goods.

But the thing that bothers me about all of the discussions about costs is we always talk about it in terms of a flat number of dollars.

We seldom discuss it in terms of its impact upon the total price or upon the reporting corporation's total revenues.

I had an interesting experience a few years ago. I was upon the Hill to testify on Senator Proxmire's Fair Credit Billing Act. Tagged on as a title toward the end of that bill were some amendments to the Truth in Lending Act.

We had a roll call and Senator Proxmire and minority members went out to vote. Some of us were standing in the hall. The credit council for a large department store, which has its own credit card system approached me.

He said, "We are with you all the way on the Fair Credit Billing things, but for Lord's sake, don't support these Truth in Lending amendments because it means that everybody who uses a computer to manage their credit system will have to reprogram, and that is going to cost us X millions dollars."

I said "Jack, that is great. How many accounts do you have?" I did a little simple division. It came out to be a one-time charge of 19 cents per account to substantially improve the Truth in Lending disclosure information.

So when we talk about $56,000 or any other figure, I would like to see it not only as a dollar amount, because that can sound very big, but I would like to see it as a percentage of corporate revenues and I would like to see it as a projected cost impact on the cost of the products.

Mr. Ryter. Are you endorsing the basic democratic ideal of just asking the public whether they want this service and are they willing to pay this price for the service.

Mr. Silbergeld. Yes, but we have some other problems when you get down to talking about cost/benefit. It is very easy to measure costs. Those are direct. Many of the benefits are intangible. As has been said many times, what kind of dollar value do you put on a person's being able to run and play tennis instead of having to walk with a cane?

Or a family not having a father or a mother still alive when the children are young.

Mr. Ryter. But you do recognize the interface, the involvement, the requirement or the necessity for the consumer to OK this and say I want this service.

Mr. Silbergeld. The problem is when you try to do a cost-benefit analysis, to reduce everything to dollars, you frequently have left out most of the benefits and you have also decided that society can't make any social decisions by passing laws, that Congress is only to act in our own economic interest.

So while they are useful, there are limitations on the use. I see limitations on the use of the cost-benefit analyses and only one of them has difficulty of measuring the benefits.

Senator METCALF. My very distinguished predecessor in the United States Senate was James E. Murray.

Mr. SILBERGELD. I worked at the FTC with Senator Murray's son.

Senator METCALF. One of the things that he was concerned about and interested in was small business, as you remember. He was Chairman of the Small Business Committee. During World War II, there was a blizzard, almost, of demands for governmental reports, from the Office of Price Administration, and so forth. So he was the author of the Federal Reports Act of 1942 because he was concerned about the costs of gathering all of this information.

I think that was a concern that was justified. But we do have to act on information and we do have to send out the questionnaires. We do have to have information-gathering to allow us to pass regulatory laws, tax laws, everything else that the Congress is involved in.

But what I was interested in was your discussion about the usefulness of the information-gathering. We asked these people to provide us some information about passenger cars, to use your example. They lump a lot of other vehicles in there that makes it absolutely without any use or any value to us who are concerned about passenger cars and not concerned about street sweepers or armored vehicles.

Mr. SILBERGELD. I would say that that 4-digit reporting category—which was not the FTC's but the OMB's, because it writes the standardization manual—is a tribute to the lobbying power of the automobile manufacturers at OMB.

I realize that every time you split out another reporting category, you increase the cost both to the reporting company and to the FTC.

I think there are a few key industries in which the potential benefits of having specific information are so tremendous that you would just have a tremendous cost-benefit ratio if you decided it on that basis.

Senator METCALF. We always get back to OMG, who either destroys the value of the categories or refuses to allow the questionnaires.

Thank you.

Mr. SILBERGELD. I would like some day to have the appropriate committee or subcommittees to hold hearings on the SIC manual product definitions and their effect upon Federal reporting programs. I think that would be a most fruitful area of inquiry.

Senator METCALF. Thank you so much for coming. Thank you for your patience in waiting. Thank you for the information you have given us, your experience with working with the Consumers Union, and trying to use some of these information-gathering programs that we have established and haven't quite worked.

Mr. SILBERGELD. Thank you.

Senator METCALF. We will be in recess now until Thursday, July 24. We will resume at 10 o'clock in this room.

[Whereupon, at 1:30 p.m., the subcommittee recessed, to reconvene at 10 a.m., Thursday, July 24, 1975.]

INFORMATION MANAGEMENT BY FEDERAL REGULATORY AGENCIES

THURSDAY, JULY 24, 1975

U.S. SENATE,
SUBCOMMITTEE ON REPORTS, ACCOUNTING, AND MANAGEMENT
OF THE COMMITTEE ON GOVERNMENT OPERATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to recess, in Room 1318, Dirksen Senate Office Building, Senator Lee Metcalf (chairman of the subcommittee) presiding.

Present: Senator Metcalf.

Also present: Vic Reinemer, staff director; E. Winslow Turner, chief counsel; Jeanne A. McNaughton, chief clerk; Lyle Ryter, minority counsel; John B. Chesson III, counsel, and Gerald Sturges, professional staff member.

Senator METCALF. The subcommittee will be in order.

Today we resume hearings on information management. Our witnesses today have a formidable record of books and articles, dealing in part with information management. I hope they will cast modesty aside, and tell the subcommittee which of their reading materials should be on our bedside reading tables. Our witness list says we will hear from Mark Green, director, and Irene Till, economist, of the Corporate Accountability Research Group.

Neither of them are here yet, so we will hear from our third witness, Professor Mark Nadel, from Cornell University.

We are delighted to hear from you. You have a prepared statement. You may proceed in your own way.

STATEMENT OF MARK V. NADEL, ASSISTANT PROFESSOR OF GOVERNMENT, CORNELL UNIVERSITY

Mr. NADEL. Thank you very much, Mr. Chairman. I am pleased to be here testifying on this important subject. I do have a prepared statement and will try to summarize that as I go along.

The collection and dissemination of information is a vital problem, and particularly these days as we talk more and more about deregulation and the possibility of deregulation in certain areas now administered by the agencies, that it should be noted this will only work if there is a free flow of information, if even stiffer requirements for information are put upon industries now regulated.

The free exchange of information as agencies currently discharge their mandate is crucial for two reasons: First, free flow of infor-

mation is essential if the agencies are to be held accountable for their actions.

Secondly, information is essential if the agency is going to get back more information. That is, when we talk about information flow, the agencies disseminate information, make their proposals known, and it is particularly important that these proposals be known as widely as possible so that more information comes back to the agencies so they can discharge their responsibilities.

While it is sometimes objected that posing more strenuous information requirements on the agencies is costly and time-consuming, it should also be pointed out that such requirements might also enable the agencies to reach better decisions.

There are two areas of information management I want to address myself to this morning. The first is the obligation, and I want to stress that word "obligation", of the agencies to solicit comments from the public.

The second area is the substance of the information. So the first is who the target is and the second is what that target information is.

At least since Sir Francis Bacon we have realized that knowledge is power. And nowhere is that more evident than in the regulatory process.

The literature of law and political science is well documented by allegations of regulatory agencies captured by the industries they have set out to regulate. No small part of that is due to information.

I would not set out a thesis that agencies are corrupt. Rather, when you get a one-sided information process, it is almost inevitable that the kind of policies you get reflect that information process. So it is essential that that information process be balanced; thanks to the chairman himself and such measures as the Federal Advisory Committee Act and the Freedom of Information Act, regulatory actions are not nearly as clothed in secrecy as they used to be. The situation has certainly improved.

I would like to suggest we need an even more basic reorientation of the information process and regulatory agencies. What I would suggest is just for agencies to sit back and wait for information to come in, is insufficient because it relegates the agencies to being simply neutral judges. We have gone away from the early conception of the progressive era where agencies themselves were supposed to be aggressive promoters of the public interest.

Rather, now they sit back and weigh the public interest on the one hand and the interest of industry on the other hand. If no information is coming in pertinent to the wider public and consumer interest, then naturally more narrow interests will prevail. Sitting back and waiting for information to come in is not enough. The agencies have to reach out and grab it.

I will give one example. On July 15, The New York Times carried a notice of an action pending by the Interstate Commerce Commission. The ICC proposed some regulations regarding buses, regulations pertaining to baggage, security, the condition of bus stations, and so on.

The point of this sounds good, but the notice appeared in just

maybe 2 column inches, buried on page 20, of The Times. It is not really The Times' fault. Less lofty publications similarly buried the story.

The question is: Who is to blame? Certainly not The Times. Even if we could blame The Times or the media, there isn't anything that Congress can really do about that.

We do have a free press and you can't impose upon the free press a requirement to brandish the Federal Register on page one.

I would argue that it is a positive obligation of the regulatory agencies themselves to make known to a much wider public such proposed rules. In this case certainly Greyhound and Continental, Trailways, and other interests, paid close attention to the proposed rules, as they should, and they can respond.

But how many bus riders respond? How many members of the public would even know of this and other regulations? How do we surmount this problem?

I think there are several rather simple ways. In the case of something like regulations pertaining to buses or other modes of transportation, it could be required, for example, that these proposed rules be posted in a prominent place in such transportation terminals. For 60 days during the notification period, with every bus ticket you could require that a leaflet be given out listing the proposed regulations.

Or for airline regulations, if the CAB is proposing certain changes in security, for baggage, for example, or reservation systems, or relief from overbooking and so on, such proposed rules ought to be placed in the back seat compartment of all airplanes for a period of 60 days. It would be very simple.

The point is, if the agencies were really serious about getting this information to the public, it could be gotten. The point is, it does not have to be gotten to the entire public.

The problem is not to alert every household in the United States of such regulations, but rather, what is most important, is to alert that portion of the public which is the consuming public, the consumers of the services.

To some extent this is done in other areas, the areas other than rulemaking proceedings. It is meritorious that, even after much prodding, the ICC finally requires moving companies now that when the estimator comes around certain ICC information has to be given to the customer, and to prove that information has been given, the customer now must sign a form indicating receipt of such information.

I would respectfully urge that this general principle could be applied also to rulemaking proceedings, and also to a wider range of nonrulemaking proceedings engaged in by the deregulatory agencies. That suggestion deals with reaching out at the target population.

Senator Metcalf. I know in your statement you suggest that maybe the utilities should be included in some of the FTC regulations and so forth.

It has been my observation that the utilities have so many propaganda materials, so much propaganda material in their envelopes,

as antistrip mining pitches and so forth, that they could not—they would have to pay an increased postal rate to take care of your proposal.

Mr. NADEL. Well, I would suggest, Senator, that rather than the propaganda which the taxpayer, the customer pays for anyway, it might be——

Senator METCALF. If we could raise the question——

Mr. NADEL. Knowing of your interest in utilities, I should have mentioned that in my oral argument as well. Certainly I think that some of the bulk could be taken out of those mailings by removing some of that propaganda and by putting in regulaory notices.

This, of course, would pertain more to the——

Senator METCALF. It would at least go to the people involved and concerned about regulatory measures to be considered.

Mr. NADEL. Yes. I think that the important principle here is to reach out to the relevant customer.

In the case of utilities, of course, it is in fact all households. In the case of airline regulations, it is people that fly.

I would like to emphasize something I put in the written statement, and that is that it is not necessary to reach everyone. Maybe more than half of the public flies. It is not necessary to reach half the public. The point is that over a period of 30 or 60 days you can reach a pretty representative sample of the traveling public, and you get a reasonably representative outpouring of views.

You may not get an outpouring of views, but the point is the agency will have tried. If people don't want to respond, you can't force people to be good citizens, but you have to provide the opportunity for them to exercise their rights and obligations as citizens. That is an important principle to apply to the regulatory process, no matter how much we ultimately deregulate.

I would like to turn to the second area of information that I mentioned. The question of what information is solicited. Our regulatory process works pretty much on the notion that it is sufficient to get submissions from interested parties, and by doing so you will get all the information you need to make an informed regulatory decision. The idea being that the impact of the decisions will be best known by the interested parties themselves. And in many, and even most cases, this may be sufficient.

But in some areas of regulation, particularly new technological areas, the whole area of telecommunications, the area of nuclear energy, the impacts may not be known, and certainly not known definitively, to the interested parties themselves.

And in these areas the problem is not only reaching out to parties who may be affected, but trying to find out what the effect will be, even beyond what the interested parties themselves may perceive.

There may be unperceived effects, in other words. I have recently been involved in a group doing research on the FCC—the Federal Communications Commission. There are a couple of examples that show that even in a well-intended regulatory process, there have been problems.

For example, recently there has exploded upon the FCC an enormous problem in citizens' band radio. From the last fiscal year to the current fiscal year, applications for citizens' band have quadrupled, and the growth curve is just going up more and more rapidly. It is incredible.

If you look at these curves, they just shoot straight up, in almost a straight vertical direction. There have been great problems beyond merely the growth in applications. There have been problems of interference of unauthorized use. Enormous problems of unlicensed use. Transmitters, as all electronic devices, are getting cheaper and cheaper and more and more people can buy them. People are using them in an unauthorized fashion, interfering with radio, television, and other mobile systems. There is even a reported incident of someone receiving a citizen band message on their electric range, when their neighbor had a particularly souped-up unit.

What does this have to do with information management? Very simply, that the FCC, when it promulgated the most relevant citizens' band regulations in 1958, did not foresee these problems. I would argue that a well-done technology assessment or political analysis should have enabled them to foresee some of these problems. Enough was known at that time, and certainly is known more recently in the areas of market analysis and the whole area of political economy, to realize if you put out a unit that any citizen can use for $100 or less, that pretty soon you are going to have real problems.

The point is it didn't occur to them. And they did not have the capacity to do that kind of analysis. And they still do not have that kind of capacity.

Now they do have an Office of Plans and Policies, but it has a very small funding—a little more than $1 million for the current fiscal year. It is really inadequate to the task.

Another example from the FCC, more recently in 1974, the FCC, in its docket 18262, approved a revolutionary new mobile telephone service, gave the approval to set aside the frequency for it and Bell Telephone may go ahead and set it up.

It is a kind of service which would enable hundreds of thousands of people in every large city to have their own portable telephone. First in their cars, but ultimately a carryaround unit.

This may sound like Dick Tracy science-fiction stuff, but the technology is there. It is a question of whether it is economically feasible. It is probably not far off.

The problem with this is that no one asked the American people in any realistic or reasonable form whether they thought it would be a good idea to have a multibillion dollar investment, and even though the investment would come from the private sector, it is an investment of social resources. No one asked if they thought it would have been a good idea to have everyone on an instant leash with a telephone hanging from their belt. The people may think it is a great idea.

But the point is, no one asked. It was a properly done decision; it took 7 years; it wasn't hush-hush; it wasn't rushed through by

any means. However, there was very little opportunity for any kind of informed public debate.

And also within the FCC, again, the considerations they looked at were only the considerations of the interested parties, of Bell, Motorola, of the competing land mobile services. The ultimate social outcome was not addressed.

Well, the point I want to leave with you is that with a little more effort, information can be gathered and disseminated. Congress now has an Office of Technology Assessment, and getting more of that information on the congressional front is important.

I would respectfully suggest that in certain areas agencies themselves be required either to do in-house or contract for a technology assessment, and that assessment should be made part of the proposed rule in the Federal Register and disseminated in the ways I outlined earlier.

In that way you can get a better idea of what the impacts may be. You can never know them definitively, but more information is certainly better.

Second, you can have a better chance of alerting people who might be affected by the areas of new technology.

In summary, regulatory agencies must be beyond being merely blank, passive slates for information. Agencies must go out and aggressively do all that is possible to solicit opinions about the need for and likely consequences of new administrative rules.

The only alternatives are shortsighted measures and capture by those agencies that can dominate the flow of information to the policymakers.

That concludes my statement.

Senator METCALF. Thank you very much for your statement. I know that you skipped, and it will be printed in the record in its entirety.

[The prepared statement of Mr. Nadel follows:]

PREPARED STATEMENT OF MARK V. NADEL, ASSISTANT PROFESSOR OF GOVERNMENT, CORNELL UNIVERSITY

I am pleased to have the opportunity to testify on the problem of information management by independent regulatory commissions.

The collection and dissemination of information is a problem of vital importance for the regulatory commissions and for the public. The free exchange of information by agencies is crucial for two reasons. First, a free flow of information from agencies to the public is essential if citizens are to have any chance of holding agencies accountable for their actions. Second, the effective dissemination of information from the agency is essential if the regulatory agency itself is going to get back information it needs to discharge its own responsibilities in the public interest. Thus, while it has been suggested that greater public participation in regulatory agency decision making would increase the time and cost of decisions, it should also be noted that it might lead to better decisions as well.

There are two related areas of information management that I

want to discuss. The first is the obligation of the regulatory agencies to elicit comments and participation from the public as well as from regulated businesses. Second is the substance of the information that agencies ought to get. These topics concern, respectively, the determination of who is affected by regulatory decisions and what the impacts of those decisions are.

At least since Sir Francis Bacon we have realized that knowledge is power and nowhere is that more apparent than in the regulatory process. The well known phenomenon of the regulatory agency "captured" by the industries it is supposed to regulate is usually due, in no small part, to the virtual monopoly of information held by major regulated industries. They not only possess information needed by agencies, but they are also what political scientists call the most "attentive constituencies" of the agencies. That is, regulated industries pay attention to what agencies are doing and the public rarely knows what is going on. It is easier to act in accord with the interests of those who are watching you than those who are not—and regulatory agencies often take this path of least resistance. Thus, in order to break this cycle it is imperative to bring about greater public involvement in agency decision making.

Thanks to such measures as the Federal Advisory Committee Act and the Freedom of Information Act, regulatory actions are not nearly as cloistered and insulated as they once were. Positive strides have certainly been made, but there is still some distance to go. Before we settle for piecemeal efforts at better public information programs, I would like to suggest that we really need a basic reorientation in the whole approach to the responsibilities of agencies in this regard. The definition of what constitutes an open as opposed to a closed door proceeding must be changed. The agencies should be something more than mere passive recipients of information.

Just sitting back and waiting for information to come in relegates the agencies to, at best, being neutral judges balancing the interests of regulated industries on the one hand equally with the broader public and consumer interest on the other. Since they hear from the former and not from the latter, it is no wonder that the charge of capture by industry is often raised.

Let us look at one example. On July 15, *The New York Times* carried a story noting that the Interstate Commerce Commission had proposed regulations designed to improve interstate bus service. The new rules related to schedule information, baggage security, standards for bus stations, and reserved seating. After decades of service ranging from substandard to terrible, one wonders what took the ICC so long—but better late than never. The point to be noted, however, is that this little item appeared on page 20. While the *Times* may not be the bus riders' favorite paper, it should be noted that the notice was similarly buried in less lofty publications as well. In accord with administrative law, the ICC solicited comments and will even go beyond that requirement by holding hearings in selected cities with interested consumers having a chance to testify. The plan of having regional hearings is certainly meritorious—but how many consumers will know about them? In fact,

consumer input will be, as usual, very minimal. That is the real crux of the problem.

And who is to blame? Who has the responsibility? While the *Times* and other papers might be faulted for not giving proposed rules more coverage, it is not entirely reasonable to expect the newspapers to give prominent coverage to every administrative rule making procedure. In any case, there is nothing that Congress can do about that particular aspect of the problem. But the responsibility ultimately rests with the regulatory agency. It is a positive responsibility of the agencies to notify the public of proposed rules that would affect them.

Now this, at first glance, appears an impossible requirement. After all, we are all affected, at least tangentially, by most regulatory actions. To alert all citizens to all rule making proceedings is admittedly an impossible and even futile task. But just because rule making affects everyone does not mean that you have to notify everyone in order to have meaningful participation. Rather, all an agency really needs to do is to target in on that segment of the public that is most actively interested in a particular regulated activity at a particular time.

For the ICC proposal I mentioned before, the Commission should order that the proposal be posted at every major but terminal in the country, or ICC leaflets could be given with each ticket purchased. These could have a form for comments and a post-paid return envelope. Such a proposal would then reach the bus riding public—those consumers who it is most important to contact. Or, for example, if the Civil Aeronautics Board has a proposed rule relating to air fares or service, the Board could order that it be included in the inflight airline magazines or put in seat back pockets as a separate leaflet. Similarly, pending Federal Power Commission rules could be included in electric company bills.

These proposals do not apply only to proposed rules, but can also be applied to the complete run of activity regulated by the independent agencies. Indeed, some progress has already been made in this regard. At long last, the ICC requires that moving companies notify prospective customers of their complaint records and settlement times as well as the movers' legal obligations in regard to pick up and delivery delays and so on. The FCC requires that broadcast licensees notify audiences of pending license renewal proceedings. This is all to the good, but the principle ought to be extended and the response of consumers ought to be greatly facilitated.

In short, the independent regulatory agencies, and other agencies using rule making procedures must go beyond merely "encouraging" public participation and go out and actively solicit participation. Furthermore, in the formal record of any rule making proceeding the efforts taken to identify and notify the affected public should be stated. Inherent in this more aggressive approach would also be reforms to make a more active citizen participation a reality. Along these lines, several measures have been extensively proposed elsewhere. For example, in 1972, the Administrative Conference of the United States recommended that charges for tran-

scripts be largely absorbed by the agencies themselves, that unnecessary duplicate filing requirements be avoided, and that assistance be provided in making information available. In its overall theme of shifting the burden of information dissemination from the interested participant to the administrative agency, the Administrative Conference was certainly on the right track. Indeed, it is absolutely outrageous for an agency supposedly regulating in the public interest to charge the public full commercial rates for transcripts as has been the case traditionally.

The idea of agencies as active solicitors of information is addressed not only to the question of *who* is solicited, but also concerns *what* information is solicited. From the standpoint of making sound policy, the problem of not soliciting the participation of a wide number of people is that potential consequences of regulatory decisions might not be known. The underlying philosophy of our political system assumes that citizens, individually and collectively, are the best judges of their own interest; if you want to know the impacts of a decision just make sure that everyone who might be affected has a chance to make their views known. For most routine decisions, this principle is sufficient. However, there are decisions, particularly in areas involving new technological developments, where informed self interest is not sufficient. In these areas, the impacts are not immediately apparent. The problem in such a situation is not that an agency hears only from regulated interests but that no one has the answers readily at hand.

In doing research on some recent FCC decisions, I have encountered some examples that illustrate this problem. For example, take the case of the Citizens Radio Service—the private two-way radios commonly known as citizens' band and readily available to all citizens for a variety of personal and business purposes. In 1958 the FCC, in Docket #11994, took some frequencies in the amateur radio band and reallocated them to citizens' band. Subsequently, the FCC made some adjustments to the frequency assignments for citizens' band, but in 1969, the Commission denied petitions for rule making looking to a reallocation of frequencies from several other services to citizens' band. So far, all this is unexceptional. The problem, however, is that by all accounts chaos has begun to reign in the citizens' band area—the largest service administered by the Commission. Citizens' band has experienced phenomenal and unexpected growth because of the ease of entry into the service (obtaining a $20 permit which is rarely denied) and the proliferation of inexpensive radio devices ($40-$100 will put you in operation). Citizens' band applications received by the FCC increased by almost 200% in fiscal year 1975 from fiscal year 1974. The FCC is absolutely swamped with a rapidly accelerating rate of applications. There are more than two million licensees, but some estimates place the total number of actual users closer to seven million since a large number of CB operators never obtain permits from the FCC—and the chances of getting caught for this violation are very very slim. Although strict adherence to citizens' band FCC regulations would alleviate most problems, the system is now burdened with such problems as souped up transmitters

causing significant interference with a variety of electronic devices including television, radio and even telephones and electric ranges. There is also indiscriminate calling, long range bouncing signals causing interference with distant CB transmissions, and use by truckers and others to evade law enforcement.

What does all this have to do with information management? Simply that the record shows that the FCC did not anticipate any of these problems—problems that a reasonably thorough analysis should have foreseen. It appears that the only thing considered was the relative social utility of CB-related hobbies (radio directed model aircraft) and ham radio. The FCC simply lacked the capacity to assess the impact of its decision. The parties that would later be adversely affected by the citizens' band decision (such as some television viewers, business mobile radio users, and legitimate citizens' band users themselves) did not realize the impacts to come. That job should have been the Commission's. Yet, the FCC, apart from a small Plans and Policies office, had and has no capacity to gather and disseminate information of that kind. It should be emphasized that this is not an example of a powerful industry simply overwhelming the FCC with data, such as often happens in relationships between AT&T and the FCC. This is simply a case of a well intentioned decision leading to a present state of near chaos because of the lack of even the most basic information gathering capacity. Citizens' band is a particularly good example of this problem because the problems that have arisen really should not have been too difficult to foresee if the FCC had the legislative mandate and capacity to assess the future impact of the frequency allocation.

The basic problem is that the rule making procedures in the FCC and the other agencies require that the agencies only need to consider materials submitted by interested parties. This runs the risk of agencies either being overwhelmed by dominant industries or of crucial considerations which are neglected altogether.

Another FCC decision in the mobile radio/telephone area illustrates the informational problem in even greater depth. In Docket #18262, the FCC has reallocated a major chunk of the present UHF spectrum to land mobile communications, the major part of which is going to a revolutionary new mobile telephone system. In the rule making proceeding, which took almost seven years, hundreds of submissions were filed and all the major affected industries were heard. But the truly amazing thing is that apparently no one in the Commission seriously addressed the question of whether the American public would want to underwrite a technology that ultimately promises to allow everyone to carry around his own telephone—and be located by the underlying computer system. Now, most Americans may be thrilled by this notion—but the point is that they had little chance to know what was going on. Furthermore, the potential implications of this decision (involving such issues as rights of privacy, transportation, and ambient radiation levels) were not considered. Indeed, even the relationship of this decision to the problem of citizens' band was not formally considered. This is especially curious since the spectrum that was reallo-

cated was also well suited for providing additional citizens' band service. Thus citizens who might have had an interest in participating had they known about the potential implications or citizens' band service, never knew that a closely related decision directly affecting their interests was being considered.

I do not mean to suggest that the FCC did things in a surreptitious manner, or that the substance of the decision was not in the public interest. The point is that we still do not have a firm basis for knowing whether that decision was the best that could have been made because the relevant information does not exist.

With a little bit more effort, that information can be gathered and can be disseminated. I would respectively suggest that agencies be required to do assessments of the broader impact of their decisions. Congress now has an Office of Technology Assessment to deal with major technological changes. Either through that office, through their own contracting, or through in-house analysis, agencies would vastly improve their informational base by assessing the impact of their proposed rules—before those rules became finalized in an order. Furthermore, such an impact statement should itself be part of the proposed rule as printed in the Federal Register and other outlets such as I suggested previously. Thus, the affected public would be in a far better position to know which federal actions post a potential impact. In effect, what I am proposing is a technology assessment statement somewhat like an environmental impact statement. The proposed regulatory impact statement, however, would apply more to long range and even indirect social and economic impact and would deal with technologies normally not covered by current requirements—such as the immensely important area of computer and telecommunications technology. The agencies could then identify impacts and reach out to those affected by the impacts.

In summary, regulatory agencies must go beyond being passive blank slates for information. Some rule making proceedings have such a great potential impact that agencies must go out and aggressively do all that is reasonably possible to solicit opinion about the need for and likely consequences of new administrative rules—information that comes in equal measure from the public and from expert sources. The only alternatives are short-sighted measures and capture by those industries that can dominate the flow of information to policy makers.

Senator Metcalf. You commented on the fact that the origin of these regulatory agencies as they were originally set out was that they—the agency itself and the staff—would represent the public interest. And now they have grown to be almost a court. One of these days some of these regulators, one or two of them, are going to put on a robe and a wig and really act as a court.

The point, however, is that many of these big questions have become adversary cases. So, I have suggested, and others have suggested, that we recognize this change and we have a consumer counsel come in and represent one side in that adversary position.

As you point out, many of the people that come in, special groups, are represented by counsel. And we have an inadequate staff on the part of the regulators.

So wouldn't you agree that we should now acknowledge that the big regulatory commissions are holding these hearings on an adversary basis rather than on the basis on which they were originally created?

Mr. NADEL. Yes, Senator. The problem is that the adversary basis now tends to be adversarial only between the affected industry interests, and the consumer as an adversary in such proceedings is usually not recognized.

I would certainly favor the public counsel proposal. In fact, the FCC itself toyed with the idea briefly, and for some reason dropped it around 1971. That would be an essential process. It is too bad that the concept of the agencies changed. Originally they were supposed to be very independent agencies that would lend their technical expertise. That has changed. So far the adversarial nature would probably have to be recognized now.

Senator METCALF. Well, some of that is the fault of the Congress, or the fault of the various legislators who appropriate money for the State commissions. But we have not appropriated enough money to the commissions for them to have staff and auditors and counsel to do their jobs. Whoever is at fault, it has grown into that other direction of the Commission just sitting there, as I am sitting here today, hearing testimony, and then making a decision, rather than sending the staff out, being militant and aggressive, in trying to do some regulating.

Mr. NADEL. There is enough blame to apportion all around. And past presidents certainly have their share, as long as the agencies are considered as repositories for people on the patronage list, and not agencies as a whole, but the top level, the commissioners, there is always going to be a maximum limit as to how good the regulatory process can be.

Senator METCALF. Of course, we are here talking about information gathering. But there is a drive all over America, sponsored by the administration, to get rid of some of these regulatory agencies. Perhaps we should. But what would replace them? Do you have any idea?

Mr. NADEL. Well, I think you have to be careful in talking about getting rid of regulatory agencies. There are differences between the agencies. I would go along with another witness this morning, Mark Green. I would say there is a difference between agencies that regulate in health and safety and those that set rates.

The crucial concept is one of choice. That is why information is so vital and, therefore, why the topic is important to today's hearings. There are some areas where all you have to do is let the market prevail, as long as the consumer has information.

For example, if we were to deregulate air fares and simply let them be subject to the competitive process, at the same time there would still have to be consumer information given on such areas as overbookings, as baggage claims, and so on, information that will allow the consumer to make a choice when in fact there was a choice.

If there are three airlines flying across the country, give the consumer information on their records.

There are some areas where giving information is not enough. Areas such as drug safety, food safety. If you were to give every consumer in the country reprints of 20 scientific monographs of tests on food additives, that would do no good, because the laymen simply cannot understand them.

There is simply no realistic process of choice in those areas.

In some fashion the market would shake it out, is what some conservative economists would say. But that is unacceptable in the kind of political system we have evolved.

I do think some deregulation is certainly in order. There is no reason now for such agencies as the ICC or the CAB to substitute their own determination of what the market requires for the consumer determination of what the market requires

Also, deregulation would be a great step toward political accountability. You have several less functions for which you want to hold the Government accountable. Perhaps we could concentrate our efforts more on the areas which are absolutely vital, such as occupational safety, health and safety, and so on.

Senator METCALF. Of course, we have regulatory agencies in the monopoly area, the Federal Power Commission and the Federal Communications Commission, and so forth, who don't have to undergo some of the competition that they have over in the airlines, for example.

And how are we going to gather, if the regulatory commission couldn't do it, how are we going to gather the information so that the consumer will be adequately represented? It is a rather complex question on a nuclear energy plant, for example. What are the costs and where should they be distributed?

Mr. NADEL. It is an enormously complex problem. One of the first problems is how you define a monopoly. For a long time A.T. & T. said everything they did was a natural monopoly. When they objected to the Carterphone interconnect decision, they said the equipment, the long lines, the local service, is a natural monopoly.

They were eventually disillusioned of that notion. Electric service in a locality, telephone service in a locality, these are all natural monopolies. The question is how to get information.

I think some redistribution of resources. Perhaps if you spent less Government resources setting the minute terms of service on trucking routes, on rail routes, on inland water routes, and so, minute things which are no business of the Government anymore and simply don't work, those resources could be transferred over to hire some more economists and auditors for the Federal Communications Commission to in fact see what the financial picture of A.T & T. is.

I know enough about the Government, the budgeting process to know that may be an unlikely process.

But the point is the resources could be mustered if the political will were there.

There are too many resources of money and talented manpower going to essentially fruitless areas now, and not enough going into areas where you really do need government information that is not forthcoming, information on what really should be a rate base of A.T. & T. Information on what our natural gas reserves really are.

It is really outrageous that for so long as we were so totally dependent on the oil industry for information on reserves. The situation is slowly being rectified, but no small part of where we are today I think is due to relying on privately supplied information.

This is not to impugn on anyone's integrity either. When you ask a self-interested person to supply information which will have enormous bearing on their financial self interests, you are just not going to get good information, no way.

So I think in those areas where you really need government information, resources should be directed. It is well worth the cost.

Senator METCALF. Thank you. Counsel?

Mr. TURNER. Professor, you mentioned deregulation in the area of rates which might be effective. You indicated that the consumer should be the one to determine what he would pay for the service.

Now, how would you protect the consumer from the service carrier determining what the consumer is going to pay for the service in the deregulated scenario that you mentioned?

Mr. NADEL. That is a real problem. At the very least this would, of course, have to be coupled with vigorous antitrust enforcement. But we have had competitive routes and we might be able to do something about overt-collusion, setting terms of those routes.

On other areas, on less traveled routes, in the airline sector—Allegheny, New England Air and so on—there is a real problem. I will admit that.

And the consumer might in fact end up paying more.

Mr. TURNER. Let's take the antitrust suggestion that you have made. It has been 10 years before the Department of Justice got to trial on the IBM case up in New York. And it may be 10 more years before they finish the trial.

Mr. NADEL. At least.

Mr. TURNER. Now, when I was in the Antitrust Division in 1957, I was on the General Motors Bus Case. That case went on 11 years before it was settled. Not tried. We never got to trial on the case. And I can go on and on and show examples of important antitrust litigation projecting on through the years before the consumer is finally given any kind of relief.

So, I am merely exploring—and we did explore it in the regulatory reform hearings, last year, and I presume they will be explored subsequently in the fall—how effective is the role of the Antitrust Division in protecting the consumer in a deregulated market.

Maybe you could help us in finding that. Is this not a real problem, and do you see any relief?

Mr. NADEL. It is certainly a real problem, even with the best of the will in the antitrust process, it is, of course, slow.

It, unfortunately, has not been without its partisan political overtones. The problem as I see it, sir, is if the regulatory process as presently constituted was working, was working well, and efficiently, there would be no question about deregulating. You simply would not deregulate because of the very problems that you mentioned, the potential for collusion and slowness and inefficiency of the antitrust litigation process itself.

But the point is that that process is not working. In fact, particularly in the areas regulated by the Interstate Commerce Commission, you are getting great inefficiencies. Although I am not an economist, the economic literature I have read seems to be unanimous in holding there are vast inefficiencies in the transportation regulatory process.

What I am suggesting is the alternative may not be optimal in the best of all possible worlds. You do have the potential for collusion and legal and illegal collusion. You still might be better off with certain kinds of deregulation in the right area. Particularly when you get down to minutia, and perhaps the real task analysis is to find out which areas you want to deregulate. In a free market you would be very hard pressed to get worse service from interstate movers than you get now.

I just can't see how the consumer would be worse off if you allowed free competition rates with interstate movers, or you allowed free competition in rates on the major trunk-airline routes.

The question is raised that the interstate routes subsidize the smaller cities. Maybe it is time to address the question of whether people flying from New York to Los Angeles should subsidize people flying between Washington and Ithaca.

It may be great for me, but I am not sure it is an ethical principle.

The point is, the present system is not doing a very efficient job, particularly in areas of transportation.

Mr. TURNER. You will agree with me that the antitrust approach is not doing a very good job either?

Mr. NADEL. I will.

Mr. TURNER. Somewhere in between you have to find a way to permit competition and yet protect the consumer from the highest rate or the lowest rate. You can put people out of business by charging low rates.

Mr. NADEL. That is right. You would want to protect the people of the efficient, small business. You would not want predatory pricing practices that would later lead to higher rates.

If you look at the economic health of much of the industry, dividing up the business has not exactly been a successful goal of the agencies. The airlines are not in very good financial shape, despite their protective regulation by the CAB.

I need say nothing, of course, about rail service, particularly passenger rail service.

Mr. TURNER. I have no further questions, Mr. Chairman.

Mr. RYTER. Professor, I enjoyed your testimony very much. Do you have any comment in the area of Congress' first attempt to collect information as a rider or amendment to the Alaskan pipeline bill last year?

Mr. NADEL. Yes, I am. I think that was a very timely and important contribution, and one which, of course, it should be added just barely passed as well.

So when we talk about spreading the blame around, there was not exactly unanimous will in Congress to get that kind of information. But having passed it, it is quite good. One certainly hopes it survives the court challenges.

Mr. Ryter. Are you familiar with any of the studies of the cost of this?

Mr. Nadel. No, sir, I am not.

Mr. Ryter. I think we had testimony earlier this week that of the 228 companies that have complied thus far, the average cost has been something in the range of $56,000 per company.

Mr. Nadel. Well, the question in such a cost breakdown is what they are attributing to the cost, and also the question of whether it is a one-time cost or a continuing cost. That is, there may be a fairly high cost in setting up the categorization of information and determining where their business fits in the three-digit code, but once that expense is undertaken, the cost of continual monitoring might be considerably lower.

I think we would have to know whether it is a one-time cost or annual cost.

Mr. Ryter. Do you have a basic familiarity with the objections raised by the corporations along the lines of requiring—asking how they are to allocate these costs, where they are to obtain information that they didn't collect in this form at all?

Mr. Nadel. Well, first of all, it is not altogether clear that they don't collect the information at all. They may not collect it in forms that are readily retrievable for governmental use, but there is a real question of how hard is it to get?

Again, it reverts back to what they are counting in those cost estimates.

Mr. Ryter. I assume you have some corporate accounting background?

Mr. Nadel. No, no professional background.

Mr. Ryter. One of the questions we asked the witness, the earlier witnesses this week, was where they would place the allocation of costs. Would it be distributed directly to the corporation, would the corporation be forced to assume the burden of this one-time startup and continuation of the cost, or should the taxpayer be asked to comment on it in one form or the other? What was your feeling on that?

Mr. Nadel. I would say it should be shared in the way these things are usually shared, as a deductible business expense. It is a cost of doing business.

I would also comment that we talk about the cost. There is also some costs in not doing this as well, assuming the purposes of the legislation were valid, those purposes being to enable more efficient regulation and more efficient monitoring of some of the giant corporations.

So that there is some cost in not having information as well, costs which are allocated usually on the consumer and on society in general.

Furthermore, these are not mom and pop stores we are talking about. These are all fairly large corporations; $50,000 or $60,000 expenses for General Motors does not strike me as extremely odious, even given the lagging car sales.

We are talking about companies with many divisions. It is very important for society to know of the lines of business and the relative profit rates and so on.

This is an important bit of public policy. These are not small companies without sufficient resources.

Mr. RYTER. This leads me to my final question, and this has to do with consciousness being raised in general about the regulatory agencies about the effects of some of the decisions. You spoke about consumer consciousness and raising consciousness of the agencies by asking in some form or another or requiring a study to reveal something.

This is constructive and I think that is why Congress has gone in the direction of having an Office of Technology. If you were—just posing a hypothetical situation—if the consuming public today were asked as to whether or not they felt bands should be allocated, citizen bands, or certain frequencies for this purpose, the purpose of a portable telephone, and in your own mind, I think, and other people's mind, there is a notion that this is a frivolous enterprise——

Mr. NADEL. I did not mean to imply it is frivolous. I think it has a very useful function.

My objection was that the problem with it should have been foreseen so that those important functions could be discharged without difficulty. I think there is a place for it.

Mr. RYTER. What do you think the consumer representative would say if he was to take a poll of the American public as to whether or not they wanted the portable telephone?

Mr. NADEL. Probably yes, but I think that—and I am not saying it should be no. I am not saying the portable telephone or the citizens' band is frivolous. The portable telephone has a lot of very positive uses, in terms of crime prevention and safety.

If people had phones in their cars, they could get in touch with emergency services faster. There are a lot of positive features. But negative features should not be assessed only. Positive features should be assessed also so we can find out ways to maximize them.

This is in no way intended to suggest that the State should stifle technology. That is a common misunderstanding of technology assessment.

While it is more sensational to focus on the negative, there are positive features as well.

Mr. RYTER. I quite agree with you there are positive and negative aspects of technology assessment. Don't you feel that people strongly pushing technology assessment, feel the results of that assessment are going to cast extreme doubt on the allocation of costs in favor of some sort of social arbitrator mechanism, where a decision is made on behalf of the population as a whole as to what areas new resources are going into?

Mr. NADEL. I have some sympathy with that objection, but you must remember what I was talking about, and I am not sure how far I want to carry it beyond what I was talking about, were areas already under a regulatory mandate, areas where you need Government action to allow the technology, where in the case of portable telephones you had to make frequencies available. It wasn't just flying up there. They had to take away several UHF channels. As long as you have to take the Government action, you should at least view some of the impacts.

Now, whether on other areas of technology currently not regulated we would want to do this, take the risk of social arbitrator, I am not sure.

While my sympathy is yes, I am very cognizant of the problems of trying to ram one person's tastes down another. But at the very least, I think the externalities of this, the effects on people that may not be consuming the technology, that these effects be widely known.

If widespread citizens' band, for example, starts to cause widespread interference with television, then I would say yes, the interests of the 90 or 95 percent of the people who don't have citizens' band are going to have to prevail. But you need information to decide whose interests are going to prevail.

Mr. RYTER. I appreciate your testimony. You have given us some very suggestive suggestions that might lead to something further.

Thank you very much.

Senator METCALF. Thank you very much for your appearance here, for your testimony, for your help. We are pleased to have your ideas on the record.

Now we will go back to the first witness, Director Mark Green of the Corporate Accountability Research Group, and the group's economist, Irene Till. Miss Till was assistant to the Antitrust Subcommittee staff of Senator Hart and long was concerned and interested in this particular area. So we are pleased to have you both with us.

Mr. TURNER. I would like to welcome Miss Till, since she and I worked together on the Antitrust Subcommittee under Senator Estes Kefauver, and we both were involved, among other things, with the drug investigation and the legislation.

Both of us worked directly with Dr. John Blair, who was, in my opinion, one of the finest economists we have ever had here on the staff of the Senate.

I am delighted that we are together again and we can share your views.

Senator METCALF. Thank you very much. I certainly concur with your accolade to Dr. Blair and Miss Till. If you have a prepared statement, go ahead.

TESTIMONY OF MARK GREEN, DIRECTOR, CORPORATE ACCOUNTABILITY RESEARCH GROUP, WASHINGTON, D.C., ACCOMPANIED BY IRENE TILL, ECONOMIST

Mr. GREEN. Thank you. This seems more of a reunion than testimony.

Miss Till and myself will just summarize our prepared statement, which will be submitted in its entirety for the record.

We appreciate the opportunity to speak here today on a subject which rarely makes the business pages, not to mention the front pages, as it certainly should—the subject of corporate disclosure.

It is an area that Adam Smith himself posed as a cornerstone of competitive capitalism. He assumed, as many still assume, that an adequate information flow to the consumer is necessary for consumer sovereignty to work; is necessary for capital markets to ade-

quately allocate the money in our society; and is necessary for investors to know where to invest and what to avoid, for governments to know where there is monopoly power and where it does not appear.

Yet, corporations have enacted a rendition of hide-and-seek when it comes to disclosure of important data. They have, in my view, deployed a service of spurious arguments to frustrate adequate disclosure to the sectors I talked about—government, investors and consumers.

First, many business spokesmen stretch the concept of trade secrets as far as some administrations have stressed the concept of national security, to cover what it was not intended to cover. Each have a legitimate aim if narrowly proscribed.

I cannot understand, for example, why a profit and loss statement by subsidiaries should not be made public. Such information such as market share information is not a patent, a process, a customer list. Yet, often that talisman of "trade secrets" is invoked to shield corporations from external scrutiny.

Second, corporations will frequently cite the fetching phrase, "right to privacy." It is especially important in a society with our Constitution that individual human beings, composed of blood and bones, not have their privacy invaded arbitrarily by government. But to apply that concept to corporate institutions, which are often private governments in terms of their impact on citizens, is an insult both to language and law, in my view.

Instead, if we would have a Freedom of Information Act, with exceptions, which apply to the government, we may want to think by analogy of a Freedom of Information Act, with exceptions, to apply to business.

Secrecy in this area is both bad policy and bad democracy.

In his first inaugural address, President Theodore Roosevelt said: "Artificial bodies such as corporations, depending on statutory law for their existence or privileges, should be subject to proper government. All supervision, and full and accurate information as to their operations, should be made public at reasonable levels." Three-quarters of a century later we are still struggling to achieve this very sensible goal.

It is perhaps predictable that business entities at times would desire secrecy about their activities, but what is far more troubling is when government becomes an acquiescing agent for such business. Yet, it is true. Instead of government being a countervailing force to corporate secrecy, much Federal policy actively collaborates to keep from the public necessary information. And by government, include both Congress and the agencies.

To take Congress, when the Supreme Court in 1961 ruled in the *St. Regis Paper* case that the Federal Trade Commission could indeed see Census Bureau manufacturing data by firm name, Congress quickly overruled the decision.

In 1963, when the Bureau of Economics and the Federal Trade Commission proposed a firm study to analyze the extent of impact of mergers and intercorporate relations, the Congress again forbade it. The two appropriations committees would not appropriate money

for it and even attached a rider to the bill that year forbidding that any money be spent that year on such a study. Said an economist involved: "Because of the influence of powerful and special interest groups and the problem of congressional appropriations which were responsible for the fact that what promised to be the most important and revealing study ever attempted concerning American business was never completed."

Even today, Mr. Chairman, I understand at 2 o'clock there is an executive session at which Senator Hruska is going to introduce an amendment to end the line of business reporting now being attempted by the FTC.

It is not an easy program to implement or define. It is being moved against legally by the potential responding companies in courts in New York and Delaware, but it is an effort well worth taking. Yet, there is a risk now that history may repeat itself and it may be quashed legislatively, as it is attempting to go forward administratively.

Also, the Federal agencies, which Professor Nadel has so well described in previous testimony, have proven even less responsive than Congress. It is hardly original to say that the agencies can often be satellites of the regulatees, though I think it is true.

For example, why has not the Civil Aeronautics Board ever made a serious or successful attempt to compel the Air Transport Association or ATA, the world cartel, to disclose more information about what they do and how they arrive at the prices they come to? Why have not the Federal Communications Commission insisted on both more investigation regarding A.T.&T. and disclosure of that information? Now finally decades later there is a serious study of A.T.&T., but it is founded on the guarantee of confidentiality, which is certainly not required by an agency which has its own subpoena power and can demand information.

Why has not the Federal Trade Commission required disclosures of the kind that are finally now inadvertently coming out about domestic and foreign slush funds to domestic politicians and foreign agents for illegal purposes, which they can do under section 6 of their Act? Such activities could be considered unfair trade practices since they competitively disadvantage an honest and ethical businessman, if he or she doesn't want to participate in such illegal activities.

We all, of course, have our own personal experiences about how agencies can frustrate information requests.

I recently was studying Washington law firms and asked the FCC for a survey they took of such firms, about whether they would provide pro bono service, that is, legal services for free, to community groups before the FCC. The Commission refused my request. Six years ago, when we began this study, we attempted to interview some attorneys at the Federal Trade Commission involving the perennial Geritol case—a request I thought that was rather unextraordinary. Yet the full Commission voted 3 to 2 to reject our request. I don't want to understate what I think was the importance of that study, but I thought that a full Commission vote was a waste of Government manpower. Finally, a congressional hearing had to be convened and we eventually got access.

For years the antitrust division of the Department of Justice would give secret clearances to business firms who solicited opinions, whether or not they would be sued based on a projected pattern of behavior, and we requested such information because we thought if entities outside the Justice Department were getting information, we should also have a right to that information. We were refused. We finally filed suit which provoked the Justice Department to make public their business review procedures and such letters.

We all have such examples, those who work in the area of corporate accountability, and often they are quite depressing. They as well involve agencies utilizing confidentiality to again shield their regulatees from greater public disclosure, again collaborating to frustrate citizen access.

Senator METCALF. Mr. Green, I wonder if I may interrupt?

For quite a while I have had a quorum call on the lights. I thought perhaps I could outwait them. Recently, however, when they make that motion to send the Sergeant at Arms around to arrest the Senators who have not reported, they have demanded a roll call.

I suspect right now they didn't get a quorum this second time around, and I better go over and answer a roll call.

[Brief recess.]

Senator METCALF. The subcommittee will resume.

I appreciate your courtesy in allowing me to go over and vote. Now we will pick up where you left off, if you can find it.

Mr. GREEN. At this time I would like to turn over the testimony to Irene Till, who will discuss the issues of confidentiality and aggregate reporting, especially as they relate to the SEC and the FTC.

Miss TILL. Mr. Chairman, one of the big problems, I think, is the fact that much of the data collected by the Federal Government is available only in the form of aggregate statistics. That is very fine if one has a macroeconomic bent and is interested in the flow of investment and the general state of the economy and wants to make predictions about what is going to happen in the future with respect to employment and so forth.

But if one is interested in the microeconomics questions: what is the state of competition in the industry? Who are the leading firms? What is their share of the market? What are their price policies? What are their profits on particular products? One, of course, is lost. You get none of that kind of information.

Winn Turner referred a minute ago to the drug investigation. When we started we had nothing more than hunches as to what exists in the prescription drug history. We recognized the fact that there were a lot of companies selling the same products, so we deduced that there must be an enormous amount of buying and selling behind the scenes.

We also realized that patents must be very important in that industry. We read Value Line and other periodicals of that sort and we discovered that if you were a sensible investor, you would put money in the drug industry. It was not until the subpoenas were issued, and we received information on their bulk purchases and sales of drugs that we learned that most of the companies, of course,

don't make the stuff they sell. They buy the bulk and simply tablet it and bottle it.

Senator METCALF. Wait a minute.

Would you, to an uninformed layman, explain that statement? They don't make the materials they sell, the drug companies don't?

Miss TILL. No. Usually for almost every drug there is only one or two, or at the most, three companies, that supply everybody in the country. And you buy the bulk, and, of course we discovered you could buy it extremely——

Senator METCALF. And then you run it through a machine and it comes out in tablets and so forth?

Miss TILL. That is right. And you put a brand name on it and you can make a 10,000 percent or more profit on the prices charged. We, of course, could not get costs of production on this stuff. What we had to use was the price at which they purchased their bulk, added their tableting and bottling costs, and then looked at their prices as compared with these costs.

Senator METCALF. How can we find that out, who makes the bulk drugs and who sells them?

Miss TILL. Well, if we had a good line of business reporting system, we would have that.

Senator METCALF. Well, we don't have. So how can we find out?

Miss TILL. How can we find it out now?

Senator METCALF. Yes.

Miss TILL. In the case of medicinal chemicals, it just happens that the Tariff Commission, now the International Trade Commission, puts out an annual booklet on medicinal chemicals and at the back of it, for many, the actual manufacturers are listed.. At the time we were working on the drug industry for the Kefauver committee back in 1959, there was a good deal of information thus supplied.

After the hearings started, however, there was less information published. There was also bulk prices that were published by the Oil, Paint, and Drug Reporter. As soon as the hearings began, many of those prices also disappeared from the publication.

So as one inquires more deeply in an industry, the data often tend to disappear before your eyes. In addition, we also got copies of their patent licensing agreements which were very revealing. You may recall that Francis Brown, who had once been alien property custodian, managing the properties of seized German firms, left his post in the Government to become president of Schering when it was sold to U.S. investors.

He was on the stand and the Senator was commenting upon the restrictive provisions in the licensing agreements of the Schering company.

For example, the Schering licenses to its licensees, provided that no licensee could sell products in anything except in final packaged form, which meant the package the druggist got. This meant that no bulk would be available to the small companies the major sources of competition in the industry.

Senator METCALF. What would this involve? One hundred capsules?

Miss Till. No, it is in powder form in great, big containers.

Senator Metcalf. I understand.

Miss Till. At the time we referred to the restrictive provisions. Francis Brown replied that no such restrictive provisions existed. It just happened that we had copies of the patent licensing agreements which had subpoenaed from his company and we read the section to him. He then modified his statement.

As an industrial economist in the Antitrust Division and FTC and with the Senate Antitrust Subcommittee, I have also found that as soon as you begin to ask pertinent questions about the state of the competition in our industry, you are up against a blank wall. You can get a pretty good idea from an enormous amount of research work but little hard data.

In many industries, as you probably know, there are marketing survey firms that collect the most detailed sales information which the companies buy at very high prices. It is awfully hard to get access to that.

When I was in HEW a couple of years ago, we discovered that NIH had subscribed to what was then the Gosselin survey, which provides this type of information. It now has another name as a result of merger and is called the National Prescription Audit of IMS.

We asked NIH for access to this information. Here we were in Social Security Administration at the time, asking a sister agency if we could look at the reports. They explained to us that they could not be made available to anyone because they had contracted with the seller to keep it confidential.

Senator Metcalf. Now, are you saying that a Government agency subscribed to a report and could not reveal it to anybody?

Miss Till. That is the position they took. They took it for quite a long time until it became rather old material, and then reluctantly we were able to get access to it.

Senator Metcalf. It was obsolescent?

Miss Till. It was historical.

Senator Metcalf. Or obsolete.

Miss Till. Turning now to data collection by Government agencies, since the 1940's we have had a most highly centralized control over the questionnaires that go out. OMB's Standard Form 83, which GAO also uses now, asks the question, "Does your agency pledge confidentailty?" meaning, "Are you going to release any information by company name?" To make it even clearer, there is a note appended that if the agency has not made a very specific answer to confidentiality, it should supply an extra sheet detailing in full what the situation is.

As a result, maintenance of confidentiality in Government agencies is just an accepted way of life. No one ever thinks of revealing the information by company name but only in aggregate statistics. And strangely enough, this exists even though the agency may have mandatory powers.

For example, we were trying to get information out of the Tariff Commission 10 years ago. The Tariff Commission told us solemnly

they were getting those data through voluntary cooperation, and consequently, they would lose their sources of information if they divulged anything.

Now they take the position there is a 1930 act upon which they rely for the collection of data. But they still promise in all their forms that there will be no sales information released by company.

The Bureau of Mines informed us that they collect everything on a voluntary basis, and they promise confidentiality. Even where an agency has mandatory powers with penalties provided in its act, it is still very reluctant. For example, you probably are aware that there is a tremendous battle going on now with respect to the FTC's corporate pattern survey. This project, which has recently been sent over to the GAO, proposes collection of some information on a plant basis as well as other data. The FTC also proposes to release the information on a company basis after 4 or 5 years from publication.

Census is taking the position that this may jeopardize their collection of similar data which they gather on a mandatory basis. They argue that if there is massive refusal on the part of corporations to submit the data, they do not have the staff to handle enforcement of the act.

Actually, although the financial penalty is very slight, I think it is $100 if you fail to file, there is also a 60-day jail sentence.

Now, whether Census feels that the latter is an unacceptable kind of penalty, it is currently raising a terrific furor, and I understand the GAO is extremely sympathetic to the Census position.

Senator METCALF. Now, wait a minute. There is a 60-day jail sentence. A whole lot of people from this administration, the Republican administration, have been sentenced to jail. They go to a country club sort of resort in Pennsylvania. Is there anyone that served any of these 60-day terms over at Lorton or in the District Jail or any of those places?

Miss TILL. I have never heard of it, Senator, although I gather if one is residing in Allenwood, he is glad to leave that prison, too.

Senator METCALF. I suppose that people that say, "Well, I could do that sentence standing on my head," they can do it up there in Pennsylvania, but I don't know whether they could do it in some of the other District jails where different types of criminals are incarcerated.

Miss TILL. Well, I suppose that if businessmen were really sent to jail, we would have to construct a number of country clubs probably all over the country. [Laughter.]

Senator METCALF. I have been concerned about the right of privacy. If you will remember in the omnibus crime control bill we provided you had a no-knock provision, and drug people, especially in enforcement, broke into people's homes in the middle of the night. Sometimes they didn't know where they were supposed to go and broke into the wrong homes.

But the corporations, it seems to me, have had a greater right of privacy than the individuals. We have given the corporations under the 14th amendment, which was supposed to free the slaves and free the corporations, a right of privacy that we don't give to individuals. Isn't that correct?

Miss TILL. I think it is true. And the strange part of it is that they have been successful in getting away with it.

I want to spend a few minutes now on the SEC itself. The SEC was pretty smart at the very outset. It has always taken the position that its questionnaires need not be submitted for clearance to the Bureau of the Budget or OMB, because they are engaged in enforcement activities.

Now, the FTC was not quite so adroit. There was a long period when even their enforcement questionnaires relating to violations of section 5 of the FTC Act or section 7 of the Clayton Act, were submitted to OMB, which spent weeks in considering them and often turned them down. SEC has avoided this problem. There are only two or three questionnaires of a general sort which they actually submit to OMB, and now to GAO under the Trans-Alaska Pipeline Act.

They do submit copies of all questionnaires they are sending out and the agency has them on file.

SEC now gets reports from over 10,000 companies, 10,000-plus.

It should be noted, however, that not all of the big ones are included, because if they don't sell stock on the stock exchanges or over the counter, they don't have to report to SEC. And no one knows how many big privately held firms exist in the country. There are all kinds of guesses.

The FTC for its quarterly financial reports gets data from some of these companies in its sample. But, of course, it is controlled also by the confidentiality rule, so that it can't even release the names. I am told that Deering-Milliken, reportedly the largest textile manufacturer in the world, is totally private. Timex is also.

The large foreign drug firms are. There is now a tendency apparently for many companies to "go private," as the phrase is to go back to a situation where they have less than 300 shareholders. Under SEC rules, they can escape making any reports.

The SEC, of course, has always taken the position that it is exclusively concerned with the disclosure in the interests of the investor.

And the investor, of course, is a very small segment of our society.

According to the Department of Commerce, 10 percent of the families in the country get 71 percent of the dividend income. So far as most of the population is concerned, only a few are investors.

Senator METCALF. Miss Till, I am sorry, but we will have to recess at this time.

[The prepared statement of Mark Green and Irene Till follows:]

PREPARED STATEMENT OF MARK GREEN AND IRENE TILL, CORPORATE ACCOUNTABILITY RESEARCH GROUP

Many of America's great problems flash painfully onto our TV sets and collective consciousness each day. One dilemma, however, hardly makes it onto the business pages not to even mention the front pages. It is the dilemma of corporate disclosures. Our giant corporations are private governments affecting the quality and cost of life for millions, yet they are often tighter than clams about their

activities. This is both bad policy and bad democracy. In his first inaugural address, President Theodore Roosevelt posed the problem well. "Artificial bodies such as corporations depending on statutory law for their existence or privileges should be subject to proper governmental supervision, and full and accurate information as to their operations should be made public at reasonable levels." Three-quarters of a century later, we are still struggling to achieve this very sensible goal.

Federal agencies collect vast amounts of detailed information from private corporations, but very little of it is made available to the public on a company basis. Most of the information is published in the form of aggregate statistics, effectively cloaking the identity and submissions of individual companies. Thus, though the public pays the bill for the gathering and collation of such information, it gains little knowledge about the specific activities of the corporations themselves.

In most cases the government agency is committed to confidential treatment of the data even before the project gets off the ground. The Federal Reports Act of 1940 requires all questionnaires going to 10 or more firms to be cleared through the Office of Management and Budget, or, under recent legislation, through the General Accounting Office. OMB's Standard Form 83, also now used by GAO, requires the agency to answer the question: "Does your agency pledge confidentiality?" The accompanying instruction emphasizes the importance of this question by stating that "if the nature and extent of confidentiality to be accorded individual returns is not clear from the form or transmittal letter, this should be explained in the Supporting Statement."

As of March 31, 1975, OMB's computer system showed a total of 2,149 questionnaires regularly going to 115 million business firms. According to that agency, confidentiality has been pledged for over 98% of the applications for clearance. The GAO has no computerized system, but processes its applications for clearance on a manual basis. Of the estimated 200 "repetitive" questionnaires (those sent out regularly by agencies) since 1974, the GAO has no figures available on commitments to confidentiality.

Confidentiality prevails whether or not the agency has mandatory authority to collect the data. For example, the International Trade Commission [1] states on its forms sent to chemical firms that collection is authorized under Section 332 of the Tariff, as amended. Despite this asserted authority to compel the production of data, the Commission very solicitously and unnecessarily adds the following: "Information reported will not be published in such a manner as to disclose the operations of individual producers. Persons who have access to individual company information are subject to penalties for unauthorized disclosure."

The Commission is so scrupulous in this regard that even submitted data are not published where a firm has a monopoly of the product or where there is concentration by two or three companies. Its defense of needy monopolists is grounded in this inventive rationale:

[1] Formerly the Tariff Commission.

a knowledgeable person might be able to estimate accurately the data submitted by the individual companies.

In response to our inquiry, the Director of the U.S. Bureau of Mines stated in a letter of April 3, 1975 that all of its information is secured on a voluntary basis with a promise of confidentiality. Its questionnaire form entitled "Capacity of Petroleum Refineries, for example, is prominently marked INDIVIDUAL COMPANY DATA—CONFIDENTIAL and states: "Unless authorization is granted in the section above the signature, the data furnished in this report will be treated in confidence by the Department of Interior, except that they may be disclosed to Federal defense agencies, or to the Congress upon official request for appropriate purposes." One can guess how many times this authorization occurs above the signatures of the officials of the major oil companies.

Within the federal bureauracy, the Securities and Exchange Commission is undoubtedly the most important source of information on the specific operation of the mass of companies doing business in the U.S. Currently, there are 10,586 companies regularly reporting to the SEC.

Though the SEC has successfully resisted clearance of its forms through the OMB, the Commission's data programs have fallen over other hurdles, some self-imposed. For example, the statutes under which the SEC operates make numerous references to the protection of the public as well as the protection of investors. Yet the SEC has seen fit to confine its protection to the latter—a group which largely includes the more affluent in our society. According to the Department of Commerce, in 1971 one percent of U.S. families—those with incomes in excess of $200,000 annually—accounted for 47 percent of dividend income. Ten percent—those with incomes over $50,000—accounted for 71 percent of dividend income.

The investment community has changed in recent years to accommodate the growth of institutional investors in the stock market. SEC Commissioner A. A. Sommer, Jr. recently informed this Subcommittee that trading in securities on the New York Stock Exchange "has become concentrated among institutional investors to the extent of 70 percent, where 10 years ago institutional activity amounted to about 30 percent." No doubt these institutions scrutinize with care the individual company data released by the SEC, but they also have available a variety of other sources of information, including paid professionals, to assist in the determination of investment policy. Under these circumstances, it would seem that the SEC could expand its horizon to include its greater statutory function—the protection of the public.

Consider, for example, its cavalier handling of line of business reporting. Here is an area of significant importance to the general public and to public agencies fighting the monopoly problem. Profits and losses by product line can provide impressive clues about the absence of competition or presence of oligopoly power, the existence of administered pricing, cross-subsidization of products in conglomerate operations, and the areas where other bottlenecks to competition exist. But instead of insisting on such disclosure, the SEC pallidly permits the firms to write their own tickets for their

breakdowns of products. The result has been chaos, with firms, unsurprisingly, choosing product categories which work to conceal rather than to disclose information on their lines of business.

A conglomerate like Coca-Cola, for example, has only one declared line of business—"the manufacture and sale of beverages." In fact they sit astride not only the soft drink industry but also frozen orange and other frozen juices, tea, coffee roasting and sales, and even water conversion systems. Pfizer, Inc., a major manufacturer and supplier of prescription drugs, conceals information on this important line of products by lumping it in a category of "*Pharmaceutical and Health Products.*" along with diagnostic products, bone and joint prostheses and dental products including "artificial teeth and dental supplies." Bulk antibiotics are included in "*Chemical Products.*" which also contain dairy and brewery specialty products as well as "food acidulants, food preservatives, antitoxidants, sequestrans, coagulants, cleaning and metal plating." There is no breakdown of data within these product categories.

The dominant function of the SEC's collection of information is the detection of misrepresentation and fraud in the marketing of securities. Registered firms, those making public offerings of stock, must file reports; all other companies, irrespective of their size and industry importance, whose stock is privately held and not offered to the public, do not report. Yet consumers buy their products and have an equal stake in both, irrespective of type of ownership. They are entitled to know who these companies are, the nature of their operations, the size and return on their investment in the conduct of their business. Nine years ago a *Fortune* article entitled "There's Plenty of Privacy Left in Private Enterprise" suggested there were at least a score of private industrial firms which qualified for listing in the 500 largest corporations in this country. Such companies include Deering-Milliken, said to be the world's largest textile manufacturer, Timex and foreign-owned drug firms as Ciba, Hoffman-LaRoche, Geigy, Organon. But if you ask the SEC for such information, they neither know nor are even interested.

And this particular device for achieving corporate secrecy appears to be growing. Under SEC regulations for over-the-counter sales, firms with more than $1 million in assets and over 500 shareholders must submit financial information to the SEC. By reducing shareholders below 500, companies are relieved of this obligation. This growing trend—referred to by Commissioner Sommer as a "disquieting fad"—is achieved by "squeeze-out mergers," "reverse splits" of stock, or making tender offers for stock purchases slightly above depressed market prices.

There are also deficiencies in SEC's administrative practices. Essential to a full and accurate reporting program is careful scrutiny and analyses of the returns submitted. But the Commission frankly admits that its staff review is confined to an examination of whether, on its face, the information submitted appears inaccurate or misleading. If pressed further, agency officials acknowledge that little time is spent on the large, well-established corporations; that real effort is focused upon firms which have been in trouble with the agency in the past or where there is reason to suspect the

possibility of falsification. The SEC inquiry into United Brands, for example, was precipitated by the company president's suicide from his New York office window—hardly a method to rely upon for determining which companies should be scrutinized more carefully. Illegal corporate campaign contributions did not surface with SEC's hurried search for discrepancies in reported information. It had to await the Watergate investigation.

Nor has the SEC used its statutory powers to impose effective order in accounting practices. From the very beginning it has relied upon the accounting profession to do the job for it. It was not until 1972 that the Council of the American Institute of Certified Public Accountants issued a report recommending the formation of a Financial Accounting Standards Board to establish accounting principles. SEC endorsed this proposal and stated it would continue its policy "looking to the private sector in establishing and improving accounting principles and standards." This has meant the continued use of the medley of "generally accepted accounting principles" which make for great disparity in accounting results. Whether the accounting principles currently in use are generally acceptable or not, the real need is for simplification and as much uniformity as can be reasonably achieved. But instead of meeting this problem directly, the SEC has ordered more footnote explanations accompanying financial statements. The net result has been a decorative embellishment of financial statements with complicated footnotes written, according to SEC Commissioner Sommer, "to obscure rather than illuminate the facts about the issues."

There are also glaring omissions in reporting. The problem of beneficial ownership has been already studied by this subcommittee in considerable detail. Another loophole is SEC's permission to omit the names of subsidiaries if, in the aggregate, they would not constitute a "substantial subsidiary." And a substantial subsidiary is defined as one whose assets or operating revenues exceed 15 percent of those of the parent and its subsidiaries on a consolidated basis. As giant firms have increased in size, largely through mergers, especially the conglomerate movement in the late 1960s, this exemption has become significant. Exxon, for example, reported total sales and operating revenues of $45 billion in 1974; the 15 percent cut-off for reporting purposes amounts to nearly $7 billion.

This secrecy applies especially to a company's foreign operations. The 10–K instructions specifically exempt, except for financial data, all reporting with respect to any foreign subsidiary "to the extent that the required disclosure would be detrimental to the registrant." Names of the foreign subsidiaries are to be filed on a confidential basis with the Commission, but the "significant subsidiary" rules can be invoked to nullify this requirement.

SEC officials assert that little of the information received from corporations is accorded confidential treatment. Under its regulations, the Division of Corporation Finance has authority to "grant applications for confidential treatment of contract provisions." According to an associate director of that division, such applications are granted only where the information submitted is imma-

terial to the interests of investors. Access to the requests made and those granted or denied, however, are sealed from public view.

Confidential treatment may also be accorded to "material other than contract provisions" where the Commission specifically approves. Similarly, information or documents obtained in the course of an investigation are deemed confidential unless the Commission authorizes disclosure. The Ernst & Ernst report on Northrup, for example, was filed early in 1975 with the SEC. But disclosure had to wait until the release of the report by Senator Church's Multinational Subcommittee in mid-June during hearings on the Northrup case. Finally, all information "classified by an appropriate department or agency of the United States in the interests of national defense or foreign policy" is barred from disclosure. As you know, there has been frequent complaint of the over-classification of documents within the government; the SEC exercises no independent authority or oversight over such materials submitted by other agencies.

Reporting firms are themselves granted great leeway in reporting under 10–K instructions. For example, competitive conditions and the firm's own competitive position in the industry are to be disclosed "if known or reasonably available to the registrant." "If a material part of the business is dependent upon a single customer or customers" that should be revealed. But if it involves contractual arrangements, the chances are that it is submitted under the provision for confidential treatment. Such discretionary language as "known or reasonably available" and "where material to an understanding of the registrant's business" is scattered throughout the 10–K instructions, and provides escape hatches in the event that the agency goes beyond a superficial scrutiny of the return and makes intensive inquiry into the affairs of the company. In general, an essential ingredient of a good questionnaire is clearcut specificity of the information requested with little opportunity for discretion to be exercised by the respondent.

The Federal Trade Commission raises a different set of problems. Here is an agency set up in 1915 for the deliberate purpose of securing corporate disclosure. Section 6 of the FTC Act empowers it to "investigate the organization, business, conduct, practices and management" of private corporations and report its findings to the public. In its early days the Commission ably fulfilled this function, but it was soon crippled by adverse court decisions, poor appointments of commissioners, and the numbing consequence of a foliating bureaucracy.

Not the least of its problems has been the requirement, since the passage of the Federal Reports Act, of clearance of its economic inquiries through OMB, and previously the Bureau of the Budget.

An important function of the FTC has been the publication of the Quarterly Financial Report providing aggregate data—by industries—on sales, profits per dollar of sales, profits on stockholders' equity and other financial information. Until a few years ago the SEC collected the data on registered firms while FTC collected for nonregistered companies. The SEC, however, uninterested in

the project, did nothing to enforce responses from some of the largest registered companies. After prolonged negotiation, the entire function was lodged in the FTC. None of this company data, of course, has ever been made public; it has been governed by a commitment to confidentiality. Even the legal and economic staff of the Commission itself, needing the data for casework and economic reports, have been marred from access.

As a result, efforts were made within the Commission to institute a line of business program outside of the QFR work. The first major attempt was made in the early sixties, and immediately ran into trouble with OMB's predecessor, the Bureau of the Budget. The agency's Business Advisory Council, to which it was submitted for advice, organized a national protest by business. Not only did the Commission fail to secure clearance; the Congress struck out all funds for this purpose from its budget, and ordered the agency to use no available money it might have for this work.

By the late 1960's, the race toward industry conglomeration was rapidly eroding the utility of the aggregate statistics published in the QFR. While firms were still specialized in their operations, the industry data were useful. But firms had diversified their operations across a number of industries. In the QFR reports, the entire activities of the conglomerate firm have been assigned to the industry category where its largest sales occur; in some instances such sales were only ten or fifteen percent of total sales. Increasingly, much of the published data became of little value.

This fact, plus the SEC's feeble accomplishment on product reporting, spurred the FTC's current effort to revive the line of business program. In order to secure clearance from OMB, then in command, a commitment to confidentiality had to be made—a concession which settled only one of the Commission's growing number of problems. The OMB's Business Advisory Council again moved quickly to thwart the effort. Hearings were held and representatives of the country's largest firms argued, among other things, that such a program would damage our "basic competitive system," that it was a first step "to completely regulate the economy," that information on market shares constitutes "trade secrets," that companies don't have such information anyhow, and so on. One argument related to the possibility of leaks within the FTC of the information collected. In defensive response, the Commission then committed itself to insulate the data from all parts of itself except for the Division of Financial Reports, which handled the data.

With the passage of the rider to the Trans-Alaska Pipeline Act in 1973, supervision shifted from OMB to GAO. In March 1974 the FTC submitted its project to GAO which at that time lacked—and still lacks, according to an FTC official—a staff competent to evaluate the intricate and complex type of economic survey this represented. Reluctantly it was cleared by GAO with a statement "recognizing that the initial information will be reliable and may be misleading." Several of the country's leading firms then moved to their next line of resistance—resort to the courts. Alcoa, GE, GM, Goodrich, International Paper, Owens-Illinois and Union

Carbide are involved in the New York case where the district court refused to enjoin the Commission. In Delaware, where the decision favored the plaintiffs in a comparable case, the companies included A. O. Smith, Inland Steel, Northwest Industries, Oscar Mayer, Merck, Goodyear, and Thomas J. Lipton. As you are undoubtedly aware, much of the energies of the Commission are absorbed with this litigation.

According to recent count, about 225 companies—out of a total of 345 receiving the line of business form—have filed returns. It is particularly unfortunate that the confidentiality commitment prevents their examination by the regular economic and legal staff of the Commission. Such examination would serve three purposes: (1) their knowledge and skills could be utilized for careful scrutiny of the submissions for discrepancies and errors; (2) access would increase their own knowledge of corporations and enhance their usefulness in the Commission, and (3) their input would be helpful in improving the kinds of questions asked in a complicated endeavor of this kind.

Instead, what has happened? The data now go directly to the Division of Financial Reports for quick scanning and then are fed into the computer. The great value of the survey—in providing detailed line of business information by individual companies—remains cloaked in secrecy.

No doubt there is valid ground for criticism of the survey itself; the agency itself recognizes this by revisions in its proposed form for the collection of the 1974 data. The point is that one learns in the doing; increasing knowledge will improve the kinds and frame of the questions asked. But the clearance process by an outside agency discourages this kind of approach.

It does not seem possible for a supervisory agency to avoid policy making. Under the new law, GAO cannot, as did OMB, second-guess the FTC's determination that the information sought it reasonably necessary in the performance of its duties. Nor can it delay interminably the rendering of an opinion.

Still, there are obstacles it can erect. Take, for example, the revival of the Corporate Pattern Survey submitted by FTC to the GAO in early 1975. This survey involves details on ownership of the 1000 largest corporations and value of shipments by product class. The FTC proposes the collection of such data every five years, with publication of the individual company data four years later. By this time the information is basically historical but useful for assessment of changes that have occurred. This program is in a state of suspension at the moment. The Bureau of the Census contends that it would imperil its own data collection. Though the Census program is mandatory, it argues that it lacks the staff for enforcement in the event of mass refusal by corporations to supply data. The GAO is impressed with this argument and has expressed great reservations as to whether FTC should proceed.

The Census position is a little difficult to understand. It is not at all certain that a corporate sit-down strike will occur. If it should, a strong-willed Census should be able to cope with the problem. Its

law provides minimum pecuniary penalties ($100 per violation), but also a jail sentence for 60 days. If imagined disasters can be used to stifle corporate disclosure—with GAO playing a leading role in the pressuring game—then corporate disclosure becomes the exception rather than the rule. A rescue operation for the FTC program may well depend upon the interest and expressed concern of members of Congress. It would be unfortunate if this case should set a new precedent within the Government for the preservation of corporate secrecy.

[Whereupon, at 11:45 a.m., the subcommittee recessed, subject to the call of the Chair.]

APPENDIX

STATE OF KANSAS

JIM LAWING
REPRESENTATIVE EIGHTY-SIXTH DISTRICT
SEDGWICK COUNTY
211 SOUTH CHAUTAUQUA
WICHITA, KANSAS 67211

TOPEKA

COMMITTEE ASSIGNMENTS
MEMBER: ELECTIONS
INSURANCE

HOUSE OF
REPRESENTATIVES

Government Operations Subcommittee
On Reports, Accounting & Management
161 Russell
Senate Office Building
Washington, D.C. 20510

Dear Committee Members and Staff

In Senator Metcalf's remarks of June 10, he sets out a dozen specific questions which the information management hearings will attempt to answer. Three specific questions are of special concern to me as a lawyer representing the Kansas Civil Liberties Union's efforts in upcoming hearings involving the Wolf Creek nuclear power generator which has been applied for jointly by the Kansas Gas & Electric Company of Wichita and the Kansas City Power & Light Company.

The three questions which Senator Metcalf stated are reproduced below as follows:

> Third. Is the information available only on an aggregated industry basis? If so, how can an agency and the users ascertain that aggregates and averages are correct if they do not see individual company data on which the aggregate information is based?
>
> Fifty. How often is the basic data regarding company operations, management, assets, liabilities, capitalization, and control collected? Should information now collected only as a part of occasional "benchmark surveys" be available on a more regular basis?
>
> Ninth. What do the agencies do to help guide the public to information in their files? How can those procedures--or publications--be improved? Is inaccurate or outdated data flagged?

To begin with, the following comments are not intended to be derogatory of the Nuclear Regulatory Commission because that body has only recently come into its own, and can hardly be given fair treatment if judged by previous actions of the Atomic Energy Commission. Nonetheless, several things have already been noted by members of the public who are trying to learn what is involved in the nuclear power plant proposals and who are trying to keep an open mind as to the merits of the application. For the record, the Kansas Civil Liberties Union has never and has no intention of ever taking a position for or against nuclear power per se. Our presence in these hearings is designed only to make certain that the principals of due process are followed.

However, it struck me initially that it is hard for due process to exist in a situation where notice of proposed hearings is issued to the public almost a year before the draft environmental impact statement is ever filed. The problem principally is that if one does not choose to intervene within a short period after publication of the notice, that party has no right to intervene later when the full information that might be obtained from the environmental impact statement becomes available. This forces parties who might want to litigate to make the choice of intervening now and waiting for the later environmental impact statement or hoping that the environmental impact statement will answer all of one's concerns so that intervention is unnecessary. That should not be the way that a regulatory agency is allowed to proceed.

Furthermore, the environmental impact statement should be filed at the same time as the notice of public hearings in order to give members of the public an initial working paper for their guidance in assessing the information collected by the agency.

An example of the need for information that should be contained in an environmental impact statement involves question number Five set forth by Senator Metcalf. The "basic data regarding company operations" in the nuclear fuel management of the proposed generating plant certainly includes knowing whether or not the applicants will actually have an adequate supply of uranium. Some people have stated to me that the current stockpiles of uranium are not likely to meet the demands of the

fifty-five nuclear generating plants that are currently in use, and that should all of the proposed plants be built, bringing the total number up to about 280, it will be impossible to meet the uranium requirements of each and every one of those operations. Therefore, it would be important for the public to know something about the contracts which the applicants have signed with companies which might or might not be in a position to supply the necessary uranium. Yet, in the specific case involving the proposed Wolf Creek generator, those who have tried to discover these contracts have been told that it is a matter of only private concern and not properly to be considered by the NRC. Whether the NRC itself will sustain that position is unknown at the present, but guidance from the Congress in support of the public's right to know whether or not the proposed contracts are actually enforceable from a practical standpoint would no doubt assist the Commission considerably and would point it in the direction of coming down on the public's side of the question.

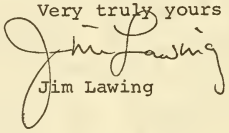
Furthermore, the amount of uranium available to the industry in general and the amount of capitalization of utilities in general cannot be depended upon to reflect the specific ability of applicants in Nuclear Regulatory Commission proceedings. Maybe Consolidated Edison has good contracts and an ample cash flow in financial reserves; but the question is, does the Kansas Gas & Electric Company have these qualities. The Commission itself and the public must be able to obtain the individual company data in the proceedings so that we can make an informed decision as to whether or not to intervene and so that the Commission itself can make the best decision on whether or not to grant the application.

The question about how the public can get the necessary information from an agency's files cries for a wise answer. For years, the Atomic Energy Commission kept the public from learning about nuclear power and especially, nuclear problems. Anything that did not cast the technology in its best light was suppressed. Therefore, not only does the Nuclear Regulatory Commission have the usual problem of communicating large amounts of technical data gathered from diverse sources to its own personnel as well as the public, it has a rather bad history of doing exactly the opposite which must be overcome. For this reason, the Subcommittee probably should go out of its way to develop an affirmative action program for the

NRC to make sure that Senator Metcalf's formulation of question number Nine is answered by responsive legislation that gives clear guidance to the NRC.

Each of the additional nine questions have ramifications on the problems of nuclear regulation and nuclear proliferation, but sufficient answers to the three points I have raised would go a long way toward overcoming many of the bad effects of nearly three decades which have dressed atomic energy and nuclear technology in Madison Avenue packaging techniques. A full and complete legislative dealing with these three questions will help ensure that the other nine are answered by the same standard of legislative diligence. It is my hope that all of the senators approach these grave questions which Senator Metcalf has raised with both open minds and a full understanding of the awesome ramifications of nuclear technology so that our children's children will be able to pursue the good life within the framework of our constitution and those absolute values, based on humanism, which has been the beacon for eight generations of Americans.

Very truly yours

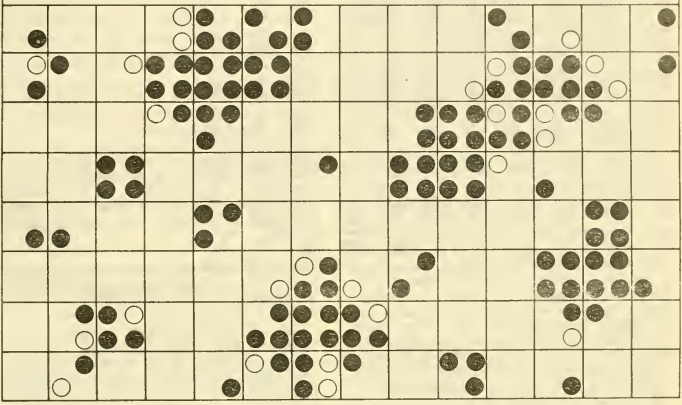


Jim Lawing

July 11, 1975

The Concentration of Economic Power

by Markley Roberts



Giant corporations dominate the American economy and the decisions of big business—on U.S. operations and on foreign operations—vitally affect the nation's prosperity and the jobs and incomes of millions of Americans.

Far too often there is no public accountability for these important decisions—no way for workers, consumers, regulatory agencies or even the elected public policymakers to get essential information on the structure and operations of big business.

Unfortunately, in their public financial statements, U.S. corporations often conceal far more than they reveal. Too often, basic cost, price, profit and investment data are hidden. There is little detailed information on the structure, ownership, and operations of America's giant business and financial institutions and their interlocking relationships. These economic giants far too often can avoid effective public regulation because Congress, government regulatory agencies and the general public—including representatives of consumers and workers—simply cannot get adequate detailed information.

MARKLEY ROBERTS is an economist in the AFL-CIO Department of Research.

The structure and operations of the U.S. economy are enormous. With a 1975 population of about 215 million people, the United States has a labor force of 95 million, including about 8 million people officially unemployed and 2 million men and women in the armed forces. There are 81 million workers in nonagricultural industries, including 14 million in federal, state and local government, and 3.5 million workers in agriculture.

Manufacturing, with 19 million workers, is the biggest source of private, non-agricultural employment. Wholesale and retail trade provides 17 million jobs, and services 14 million jobs. Contract construction accounts for about 4 million jobs; finance, insurance, and real estate provide another 4 million, with just less than 700,000 employed in mining.

Union membership is strong among workers in manufacturing, contract construction, mining, transportation, communications and government. There is relatively low unionization in the service industries, wholesale and retail trade, agriculture and finance, insurance and real estate.

Big business is a small part of the total U.S. business population. The nation has more than 11 million

firms—1.5 million business corporations, 6 million independently owned and operated proprietorships and 800,000 partnerships, plus another 3 million firms engaged in agriculture, forestry and fisheries.

Corporations get about 85 percent of all business receipts, so it's obvious that most proprietorships and partnerships are "small business." So are most corporations. About 85 percent of all business firms had receipts of less than $100,000 in 1967—three-fourths got less than $50,000 and half got less than $10,000.

The overwhelming majority of the 11 million firms—97 percent—are "small business," with business receipts under $1 million a year, according to a recent Senate Small Business Committee report. The biggest "small business" would employ no more than 60 workers, the report says, and most have fewer—only one or two hired workers or even none. There are only 300,000 "large firms" with business receipts greater than $1 million.

More than half of the 11 million business firms are in services or retail trade—including very small business firms like beauty parlors or "mom and pop" stores. Another 1 million firms are in finance, insurance, and real estate. Contract construction has had more than 800,000 firms in boom times, but during a recession many of them simply go out of business.

The nation's 400,000 manufacturing firms account for less than 4 percent of all business enterprises, but this 4 percent accounts for 40 percent of all business receipts. And these manufacturing firms have a very high degree of concentration. The Federal Trade Commission reports 3,300 manufacturing corporations with assets of $10 million or more, including 730 corporations with assets of $100 million or more and 120 corporations with assets of $1 billion or more.

A very small number of manufacturing corporations—the top 100—get about 50 percent of all profits in manufacturing. The top 200 get 70 percent and the top 500 get 80 percent.

These top "Fortune 500" industrial corporations are the ones most people think of when discussing economic concentration. These corporate giants had total 1973 assets of more than $500 billion, sales of more than $600 billion, profits of almost $40 billion and employed more than 15 million workers, more than 75 percent of all workers in manufacturing. Eight of the world's 10 biggest industrial companies are U.S.-based multinational corporations.

In addition to the top 500 industrial giants—led by General Motors, Exxon and Ford—Fortune Magazine also lists the top 50 companies in banking, life insurance, diversified financial operations, retailing, transportation, and utilities—another 300 business enterprises.

The top 50 banks—led by Bank of America, First National City Bank, and Chase Manhattan—had 1973 assets of $460 billion, after-tax income of $2.5 billion, and employed more than 430,000 workers.

Of the 14,000 private commercial banks in the nation, about 3,000 are affiliated with bank-holding companies. The 10 biggest banks hold 25 percent of all bank assets and the 100 biggest banks hold more than 50 percent of all bank assets. A 1968 staff report by the House Banking Committee revealed that the 49 biggest banks hold 5 percent leverage control in more than 5,000 major corporations and hold 8,000 interlocking directorships in more than 6,500 major business corporations. These banks also control billions in trust fund dollars, including pension funds.

There is a very high degree of "concentration of stockholdings in a whole range of companies—energy, manufacturing, transportation, communications and retail trade—among a handful of New York bank trust departments," according to a 1973 report of the Senate Government Operations Committee. And the concentration of economic power is still further increased by these big banks owning large blocks of stock in each other.

The top 50 life insurance companies—led by Prudential, Metropolitan of New York, and Equitable—had assets of $205 billion, net income of $1 billion and employed 410,000 workers. The top 50 diversified financial companies had assets of $125 billion, net income of $2 billion, and employed 350,000 workers.

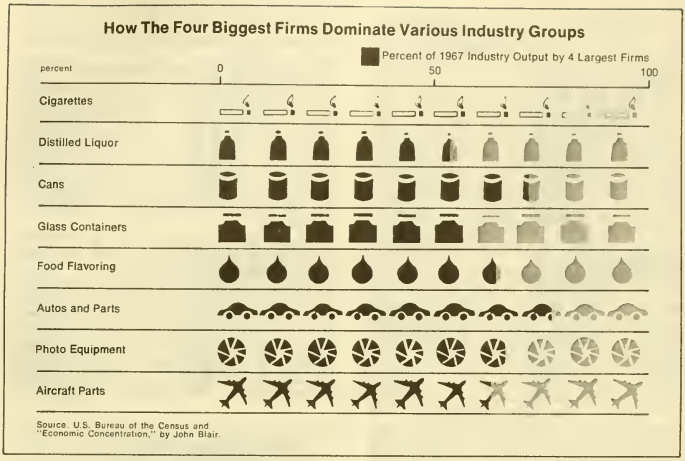
The top 50 retailing companies—led by Sears Roebuck, Safeway and A & P—had assets of $45 billion, net income of $2 billion, and employed 2.7 million workers.

The top 50 transportation companies—led by United Air Lines, Penn Central and Trans World Airlines—had assets of $48 billion, net income of $860 million, and employed 1 million workers. Penn Central, $4 billion in assets and $2 billion in operating revenues, was running a $170 million loss in 1973.

The top 50 utilities—led by American Telephone & Telegraph, Consolidated Edison of New York, and Pacific Gas & Electric—had 1973 assets of $180 billion, net incomes of $7 billion, and employed 1.3 million workers.

In addition to "aggregate concentration" of corporate assets, corporate profits and employment by corporate giants, the U.S. economy is marked also by a high degree of "market concentration" in many industries—a concentration of production, shipments and sales of the top four companies in a particular industry. This is what economists call "oligopoly" or competition among the few. This kind of "competition" often results in anti-competitive "administered pricing" with joint action, sometimes in violation of the antitrust laws, and almost always results in raising prices above competitive levels. The Federal Trade Commission has estimated that U.S. consumers pay as much as an extra $80 to $100 billion each year—out of total purchases of $900 billion—in higher prices because of this monopoly power.

Highly concentrated industries—where the top four companies produce 50 percent or more of total industry output—account for one-third of total manufac-



turing. These highly concentrated industries include autos (General Motors, Ford, Chrysler and American Motors), primary metals (U.S. Steel, Bethlehem, Armco, and Aluminum Company of America), chemicals (DuPont, Union Carbide, Dow and Monsanto), and electrical machinery (led by General Electric and Westinghouse).

Another one-third of all manufacturing takes place in "moderately concentrated" industries where the top four companies produce 25 to 50 percent of the industry output. The final one-third of all manufacturing takes place in relatively unconcentrated industries—but even in these industries the average share of industry output held by the top four companies in each industry was more than 15 percent.

The available information on economic concentration and its effects is skimpy and sometimes open to a variety of interpretations. Nevertheless, it is clear that a very high degree of economic concentration exists in the U.S. economy.

No simple answer can explain how all this economic concentration came about. In part, big corporations are the result of self-generated internal growth and the technological imperatives of mass production, which in turn depend on expanding mass markets and widely distributed mass buying power. Advertising is another part of the explanation, particularly in consumer goods industries.

"Mergers, more than any single economics factor, explain the existing structure of the industrial sector of the United States economy," says Willard F. Mueller, economics professor at the University of Wisconsin and former chief economist at the Federal Trade Commission. "Most contemporary big businesses owe their relative size to merger-accelerated growth, and current levels of concentration in many industries are directly linked to one or more of the merger movements that have swept through American industry."

The first big merger wave from 1897 to 1905 involved consolidations of thousands of previously competing firms into "trusts" or giant holding companies. Some 2,800 mergers took place during these years, producing such enduring corporate giants as U.S. Steel organized by J. P. Morgan and Standard Oil of New Jersey organized by John D. Rockefeller. Many other giants of American industry like General Electric, General Motors, DuPont and American Tobacco were formed from consolidations of hundreds of competing companies.

"There can be little doubt that one of the driving forces behind the formation of many of these consolidations was the desire to eliminate competition," says John Blair, now a professor at the University of South Florida and formerly chief economist for the Senate Subcommittee on Antitrust and Monopoly.

The second big round came in the late 1920s when more than 4,600 mergers took place. This time the food industry and food distribution were added to the iron and steel and machinery as major areas of con-

centration. General Foods and retail food chains like A&P, Safeway and Kroger were organized during these years. Then, as now, investment bankers and financiers played a key role in stimulating merger activity.

The third big merger movement started in the late 1950s and sharply accelerated in the 1960s, reached a record 4,500 mergers in 1969. The years 1965 through 1972 saw some 19,000 mergers. A new twist of this third merger movement was the conglomerate pattern of acquisitions of companies totally unrelated to the product lines of the acquiring company. In previous merger movements, the pattern was elimination of competition (horizontal mergers) or integration backwards and forward as in a steel mill acquiring an iron ore company and a steel fabricating company (vertical mergers).

But the conglomerate merger movement brought together companies operating in many different industries and in many different markets and in many different countries. Textron was one of the early conglomerates. International Telephone & Telegraph is a multinational conglomerate of extraordinary size and complexity. Much of ITT's merger and acquisition program was handled by the Wall Street investment banking firm of Lazard Freres & Co. In a 1971 study of ITT and four other major conglomerates, a staff report of the House Judiciary Subcommittee on Antitrust concluded that "In view of the large income derived from merger transactions, it is evident that the major investment banking firms have been substantial contributors to the magnitude of the merger wave."

One effect of conglomerate mergers is to raise "aggregate concentration" rather than "market concentration" in the U.S. economy. The antitrust laws are fairly explicit in restraining horizontal or vertical integration within an industry, but much less so on conglomerate mergers which pull together non-competing business firms.

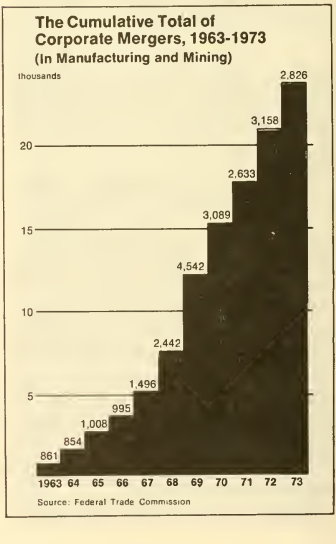
Economists don't understand the conglomerate urge. "In the case of the large conglomerate, our theory of the firm is clearly inadequate to enable us to understand its nature or predict its performance—more or less necessary prerequisites for advice to policymakers — though the combined trends in concentration and growth of conglomerates into concentrated markets is sufficient cause for concern," says James W. McKie, a Vanderbilt University economics professor writing in a National Bureau of Economic Research survey of industrial organization. The recessions of 1969-70 and 1974-75 did more to slow down conglomerate mergers than any effective antitrust regulation.

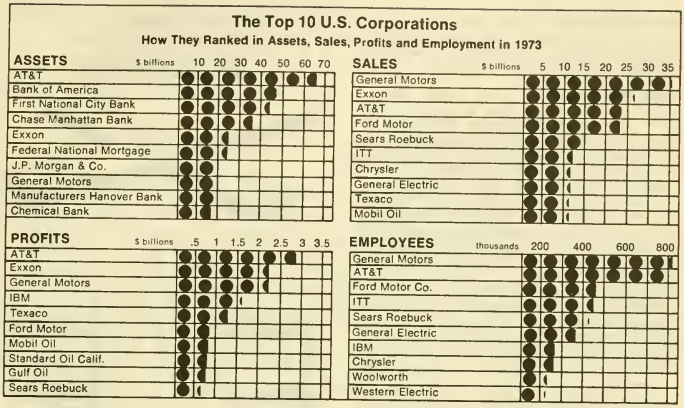
The big U.S.-based multinational corporations operate through 10,000 subsidiaries and foreign affiliates all over the world with no effective regulation. These multinational corporations—including almost all of the "Fortune 500" industrial firms and the top 50 banks—are aggressively expanding their foreign operations, often making profitable deals directly with communist governments. For many of them, foreign earnings make up more than 50 percent of total income. So they juggle foreign and U.S. production and profits to avoid U.S. taxes.

The multinationals export production and jobs of American workers. They export capital and technology developed in the United States at the expense of the American taxpayer. U.S. multinational expansion overseas, often in the newest technological industries, slows U.S. economic growth and cuts job opportunities at home. This is eroding the nation's industrial base, and the shutdowns on U.S. plants—as production and jobs are shifted abroad—are undermining the strength of large and small communities throughout America.

Congress failed to act in 1974 on the AFL-CIO-supported trade legislation to deal with these problems, but the problems won't go away.

"Explosive growth by acquisition by our largest corporations has resulted in changes that confront the public with a situation where the American economy will be dominated by virtually self-contained economic domains," the House antitrust staff report warned, with the possibility that "the American economy will be dominated by a few hundred business suzerainties under whose influence a multitude of





small, weak, quasi-independent corporations will be permitted a subordinate and supplemental role."

This pictures does not bother such "avant garde" social critics as John Kenneth Galbraith who sees "the highest level of development" in such corporate giants as General Motors, General Electric and IBM. In this, Galbraith echoes the big business view of romantic glorification of swashbuckling "captains of industry."

One unfortunate result of this willing acceptance of big business concentration of economic power—which Galbraith would like to socialize—is a too-easy rejection of antitrust policy or regulation as a national purpose and a rejection of business competition as an essential part of American economic life to benefit consumers and to achieve economic progress.

Persistent critics of Galbraith's theories include Professor Mueller and Professor Walter Adams of Michigan State University. They argue that Galbraith's "new industrial state" is based on a false "technological imperative," on a wrong assumption that "bigness" is the result of technology requirements for large-scale production, invention and innovation. In fact, they point out, careful studies on this subject show that productive efficiency, invention and innovation slow down in big corporations and in highly concentrated industries.

There is, therefore, a strong economic argument for government policy on economic concentration—in addition to the basic social and political need to control and, wherever possible, to prevent gigantic concentrations of business power which can undermine democratic institutions.

No simple summary of U.S. policy or economic concentration is possible—and the results are somewhat ambiguous. Although "aggregate concentration" has increased, the situation in "market concentration" is less clear. The twists and turnings of antitrust policy in U.S. history don't paint a clear picture.

In 1890, passage of the Sherman Act made it illegal to "monopolize trade" and Congress also outlawed all "combination or conspiracy in restraint of trade." In 1911 the Supreme Court broke up the Standard Oil trust and the tobacco trust, but set forth a "rule of reason" that only unreasonable restraints on trade were illegal. This seriously weakened all subsequent antitrust policy.

In 1914 Congress passed the Clayton Act to outlaw specific anti-competitive actions like price discrimination and interlocking directorates. Also in 1914 Congress set up the Federal Trade Commission to fight anti-competitive, monopolistic practices of U.S. corporations. And in 1950 the Celler-Kefauver Antimerger Act stopped horizontal mergers by acquisitions or purchase of assets.

One source of continuing ambivalence in the nation's approach to antitrust policy is the difference between "structure-oriented" experts who say the mere possession of concentrated, monopolistic power is wrong and should be broken up and the "action-oriented" experts who say that only illegal conduct is wrong and should be stopped.

Either way, it's important to have the facts—and, unfortunately, accurate information on the structure, conduct and performance of the big banks and corporations is woefully lacking. The massive studies and reports of the Temporary National Economic Commission of the New Deal era are far out of date.

The Senate Small Business Committee headed by

Sen. Gaylord Nelson (D-Wis.) has spotlighted the role of giant corporations in agribusiness, energy and natural resources, and the need for more informative corporate reporting.

Public hearings by the Senate Antitrust Subcommittee headed by the late Sen. Estes Kefauver (D-Tenn.) and more recently by Sen. Philip Hart (D-Mich.) have divulged important industry information. And Senate Government Operations Committee studies pushed by Sen. Lee Metcalf (D-Mont.) and Sen. Edmund Muskie (D-Maine) have revealed the extraordinarily high concentration and control of the nation's biggest corporations in the top six New York City "superbanks." But much more information is needed on the ownership and on the domestic and foreign operations of the big banks and big corporations.

Workers have a direct interest in getting more information about the corporations with which they bargain. Annual corporation financial reports don't give enough information and it's difficult to bargain effectively with subsidiaries of big corporations. Financial information on subsidiary companies is hidden in consolidated financial reports of conglomerates. And U.S.-based multinational firms can export technology, production and jobs to their foreign subsidiaries before unions can find out what's going on.

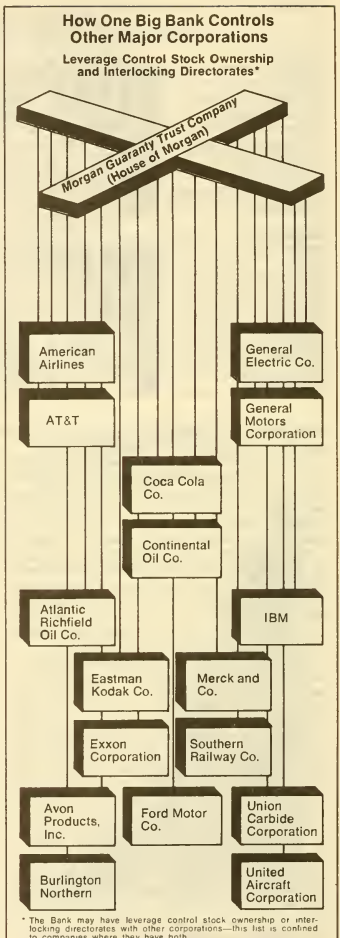
The big, multi-product, multi-market, multinational corporations don't want to reveal line-of-product sales, cost, price and profit data. They want to keep the secrecy barrier which protects them from criticism and regulation.

Much more adequate public disclosure of basic economic information is needed. The quarterly line-of-business reports now required of the top 345 manufacturing corporations by the Federal Trade Commission are only a small step in the right direction.

Also aimed in the right direction are the model corporate disclosure regulations proposed by a federal interagency committee to get detailed information on corporate structure, voting stock ownership, interlocking corporate directorships, and many other aspects of the structure and operations of big corporations.

The AFL-CIO has called on Congress for a comprehensive investigation of the structure of the U.S. economy, the role of mergers and acquisitions at home and abroad in increasing economic concentration, the interlocking relationships among the giant corporations and banks, their control of key parts of the U.S. economy, their effects on prices, income distribution, America's position in the world economy and the impact of these tremendous aggregations of economic power on democratic institutions.

Without adequate information, economic policy-making is seriously handicapped. Accurate, timely, comprehensive information is an essential check on concentrated economic power. "Sunlight is the best disinfectant" was the advice from Supreme Court Justice Louis D. Brandeis, an early opponent of excessive business power.



Reprinted from May 1975
AFL-CIO AMERICAN FEDERATIONIST

(Staff NOTE.—According to the most recent information at the Federal Reserve System, 36 commercial banks did not participate in the July, 1975 Monthly Interest Rate Survey. Half of these banks (18) are among the 300 largest banks (according to deposits) ranked in Moody's Bank & Finance Manual (as of Dec. 31, 1974). The largest of these 18, Security Pacific National Bank of Los Angeles, was ranked No. 10 in size. The next largest, Wachovia Bank and Trust, N.A., of Winston Salem, N.C., ranked 29th.)

BOARD OF GOVERNORS,
OF THE FEDERAL RESERVE SYSTEM,
Washington, D.C., September 16, 1975.

Mr. VICTOR REINEMER,
Staff Director, Subcommittee on Reports, Accounting and Management, Committee on Government Operations, U.S. Senate, Washington, D.C.

DEAR MR. REINEMER: Pursuant to your request of September 10, 1975, please find enclosed a list of those commercial banks that participated in the Board of Governors' Monthly Interest Rate Survey for the month of November 1974, and that failed to so participate for the month of July 1975, the latest survey period for which results are available. Also enclosed is a list of seven commercial banks that reported rates on consumer installment loans for the November 1974 survey period, and that failed to report such rates for the July 1975 survey. These seven banks do, however, continue to participate with respect to other portions of the survey.

It should be noted that all of the banks listed on the attached schedules may not have permanently discontinued their voluntary participation in the Board's Monthly Interest Rate Survey as a result of the Board's decision to release individual bank data, since some of the listed banks may, for some other reason, have failed to respond to the July 1975 survey.

If I can be of any further assistance to the Subcommittee in this matter, please feel free to contact me.

Sincerely yours,

KENNETH A. GUENTHER,
Assistant to the Board.

Enclosures.

Banks which voluntarily participated in the Board of Governors' November 1974 monthly interest rate survey but not in the July 1975 survey

Bank Name	*City and State*
Maplewood Bank & Trust Co	Maplewood, N.J.
Hempstead Bank	Hempstead, N.Y.
Security National Bank	Hempstead, N.Y.
Hazelton National Bank	Hazelton, Pa.
Central National Bank	Cleveland, Ohio
Dollar Savings & Trust Co	Youngstown, Ohio
American National Bank of Md	Silver Spring, Md.
Wachovia Bank & Trust Co., N. A	Winston Salem, N.C.
South Carolina National Bank	Charleston, S.C.
Bankers Trust of South Carolina	Columbia, S.C.
Fort Lauderdale National Bank	Fort Lauderdale, Fla.
St. Petersburg Bank and Trust Co	St. Petersburg, Fla.
Exchange National Bank of Tampa	Tampa, Fla.
Fulton National Bank of Atlanta	Atlanta, Ga.
Citizens and Southern National Bank	Savannah, Ga.
First National Bank of Commerce	New Orleans, La.
LaSalle National Bank	Chicago, Ill.
Union National Bank & Trust Co	Joliet, Ill.
Peoples Bank & Trust Co	Cedar Rapids, Iowa
Council Bluffs Savings Bank	Council Bluffs, Iowa
First National Bank of Dubuque	Dubuque, Iowa
City National Bank of Detroit	Detroit, Mich.
Detroit Bank & Trust Co	Detroit, Mich.
First National Bank in Mount Clemens	Mount Clemens, Mich.
Citizens National Bank & Trust Co	Baytown, Tex.
Security Pacific National Bank	Los Angeles, Calif.
Great Western National Bank	Portland, Oreg.
First Security Bank of Utah	Ogden, Utah
Valley National Bank of Arizona	Phoenix, Ariz.

Banks which reported consumer installment rates for the Board of Governors' November 1974 monthly interest rate survey but not for July 1975 survey

Bank Name	*City and State*
First Agricultural Bank of Berkshire	Pittsfield, Mass.
New Jersey Bank, N. A	Clifton, N.J.
North Carolina National Bank	Charlotte, N.C.
Society National Bank of Cleveland	Cleveland, Ohio
Ohio Citizens Trust Co	Toledo, Ohio
Provident National Bank	Bryn Mawr, Pa.
First & Merchants National Bank	Richmond, Va.

[From The Washington Post, Sept. 12, 1975]

VEPCO FINED $60,000 FOR A-PLANT FAULT

(By Hal Willard)

The strongest penalties ever imposed on the nuclear power industry were levied yesterday against the Virginia Electric and Power Co. for violations in connection with construction of its four-reactor plant over a geologic fault in Louisa County.

The Atomic Safety and Licensing Board fined Vepco $60,000, the maximum allowed by law, and set up stringent conditions that the company must meet to maintain a nuclear license for its North Anna plant.

Vepco characterized the decision yesterday as "novel" and said the company "expects to appeal."

In the history of the use of nuclear energy only nine civil penalties have been levied against power companies. Vepco has received three of them. No other company has received more than one.

"In view of the licensee's high rate of civil penalties," the ASLB said, ". . . the staff (of the Nuclear Regulatory Commission) is requested to evaluate the licensee's performance in depth to determine whether additional monitoring . . . is needed beyond that employed in the routine follow ups to violations and infractions."

Vepco was convicted of making 12 "material false statements" to the NRC in reference to the geologic fault. In essence, they were that Vepco said there were no faults at the North Anna site and none were suspected. All parties, including Vepco, now agree the fault exists.

The law says a fine of $5,000 is the maximum that may be imposed for such a violation: 12 violations equals $60,000.

Three conditions were imposed with the fine:

The chief executive officer of Vepco shall issue "a statement of policy expressing the strong commitment" of Vepco to "fully discharge all of its responsibilities, duties and obligations" under the Atomic Energy Act and NRC rules and regulations . . ." The ASLB also said it wants Vepco to state that it understands the need for NRC evaluation of all safety matters. This must be issued within 30 days.

Vepco "shall prepare a management evaluation and analysis of its entire current organizational structure from the point of view of its effectiveness in implementing the statement of policy required above." The ASLB said it wants to make sure Vepco has the "management characteristics needed to provide the necessary confidence in the ability" of Vepco to implement is statement of policy.

Vepco "shall analyze and report on its contract policy with those contractors" it hires for projects requiring permits or licenses from the NRC. "The intent of the board is to assure that contractors employed by the licensee are committed and clear as to their obligations and responsibilities . . ."

The geological conditions at the North Anna site were investigated by Vepco consultants in 1968 and 1969. They said they found no fault. An outside geologist found the fault in 1970 and Vepco's consultants confirmed the fault in May, 1973.

Vepco said yesterday: "Naturally, we are disappointed because, as all parties agreed, the statements made by Vepco were believed to be true at the time they were made. There was never any intent to mislead or deceive anyone."

The ASLB addressed itself to that point: If Vepco "were permitted to avoid responsibility because its agents or its independent contractors failed to inform it of material information, it could thwart the purpose" of the Atomic Energy Act, which includes protecting "the health and safety of the public."

All nuclear power plants are designed to withstand earthquakes. However, none have been subjected to an earthquake so the design isn't proven. It is feared that if the design failed, lethal amounts of radioactivity might be released from a nuclear plant.

The presence of a geologic fault means the earth has moved at some prior time—and the likelihood is greater that it will move again there as opposed to a location that has always been stable.

Previous official government actions have declared the North Anna site safe under the NRC criteria, which stipulates that geologic evidence show the earth has been stable for at least 35,000 years. The North Anna site, most geologists agreed at hearings there, has been stable for millions of years.

However, most also said that nuclear power plants should not be built on geologic faults, just in case.

The safety board's decision is the culmination of efforts by a citizens' environmentalist group, the North Anna Environmental Coalition, that brought the existence of the fault to public attention in August, 1973, and has pushed for action against Vepco ever since.

The environmental coalition brought the original charges of making material false statements against Vepco, citing 19 violations. The NRC staff agreed on 12 violations and proceeded with the case.

Vepco had reported existence of the fault to the NRC in May, 1973. The late Dr. John Funkhouser, a professor of geology at John Tyler Community College in Chester, Va., discovered the fault in February, 1970, and said in a deposition to the NRC that he reported his findings to the Vepco engineer Herbert Engelman, Jr., on the site.

Engelman testified at a hearing that he didn't remember being told, and Vepco officials testified that he never reported the Funkhouser discovery to the company.

The truthfulness and completeness of information provided by the power companies to the NRC "goes to the very heart of the regulatory process," the safety board said. The NRC depends on "quality assurance" programs within each power company to back up its own inspections in an effort to guarantee safety.

In its statement yesterday, Vepco said "if ultimately the company is required to pay the fine, it would be excluded as an expense for rate-making purposes."

Company officials originally had testified at a safety board hearing that any fines would be charged to rate paying customers, but the Virginia Corporation Commission said fines must be paid out of profits.

The safety board's report was signed by chairman John B. Farmakides and John F. Wolf. The third member, Lester Kornblith, Jr., filed an opinion "dissenting in part," and declaring that he felt there were only four material false statements, but that one was so blatant it should carry a $75,000 fine.

○